# CFS-W501L/S

# SERVICE MANUAL

*AEP Model*
*CFS-501L:*

*E Model*
*CFS-501S:*

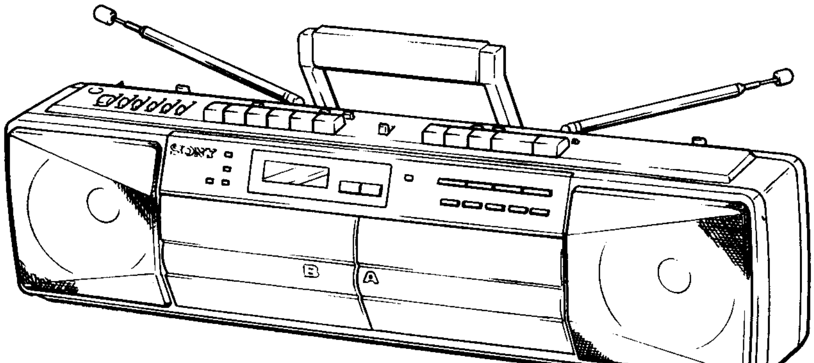

FIGURE: CFS-W501L

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## SPECIFICATIONS

| | |
|---|---|
| Frequency range | FM 87.5—108 MHz (50 kHz increments)<br>MW 531—1611 kHz (9 kHz increments)<br>LW 153—281 kHz (AEP Model)<br>SW-1 5.85—6.35 MHz (49 m)<br>SW-2 7.00—7.50 MHz (41 m)<br>SW-3 9.40—9.90 MHz (31 m)<br>SW-4 11.60—12.10 MHz (25 m)<br>SW-5 15.10—15.60 MHz (19 m)<br>SW-6 17.55—18.05 MHz (16 m)<br>SW-7 21.40—21.90 MHz (13 m) |
| Antennas | FM/SW: Telescopic<br>MW/LW: Built-in ferrite bar (LW: AEP Model) |
| Recording system | 4-track, 2-channel stereo |
| Frequency response | 80—10,000 Hz |
| Speakers | Full-range: 10 cm (4 inches) × 2 |
| Peak music power output | 11 W |
| Rated power output | 2.3 W + 2.3 W at 10% harmonic distortion in 9 V DC operation |
| Inputs | MIX MIC input jack (mono minijack) (1)<br>sensitivity 3.88 mV for low-impedance microphone<br>LINE IN jacks (phono) (2)<br>(input impedance 47 kilohms, sensitivity 0.44 V) |
| Outputs | Headphones jack (stereo minijack) for 8—300 ohm impedance headphones |
| Power requirements | 220 V AC 50 Hz (AEP Model) } or<br>110–120/220–240 V AC 50/60 Hz (E Model) } or<br>9 V DC, six R20 (size D) batteries<br>Clock/tuner memory: 3 V DC, two R6 (size AA)<br>9 V DC, six R20 (size D) batteries<br>Clock/tuner memory: 3 V DC, two R6 (size AA) |

| | |
|---|---|
| **Tape Transport Mechanism Type** | **MF-W501PB-75D (Deck A)** |
| | **MF-W301RP-75D (Deck B)** |
| **Similar Mechanism Set** | **CFS-W401** |

Power consumption
14 W in AC Operation

Battery life

| Batteries | FM recording |
|---|---|
| Sony New Super SUM-1 (NS) | approx. 15 hours |
| Sony AM1 alkaline | approx. 26 hours |

For clock/tuner memory: Approx. 1 year with Sony SUM-3 (NS).

| | |
|---|---|
| Dimensions | Approx. 530 × 134 × 127 mm (w/h/d)<br>(20 7/8 × 5 3/8 × 5 inches) incl. projecting parts and controls, not incl. handle |
| Weight | Approx. 3.6 kg (7 lb 15 oz) incl. batteries |
| Accessory supplied | AC power cord (1) |
| Optional accessory | Cleaning kit KK-4 |

Design and specifications subject to change without notice.

MICROFILM

## FM/MW/LW/SW STEREO CASSETTE-CORDER

SONY®

TC

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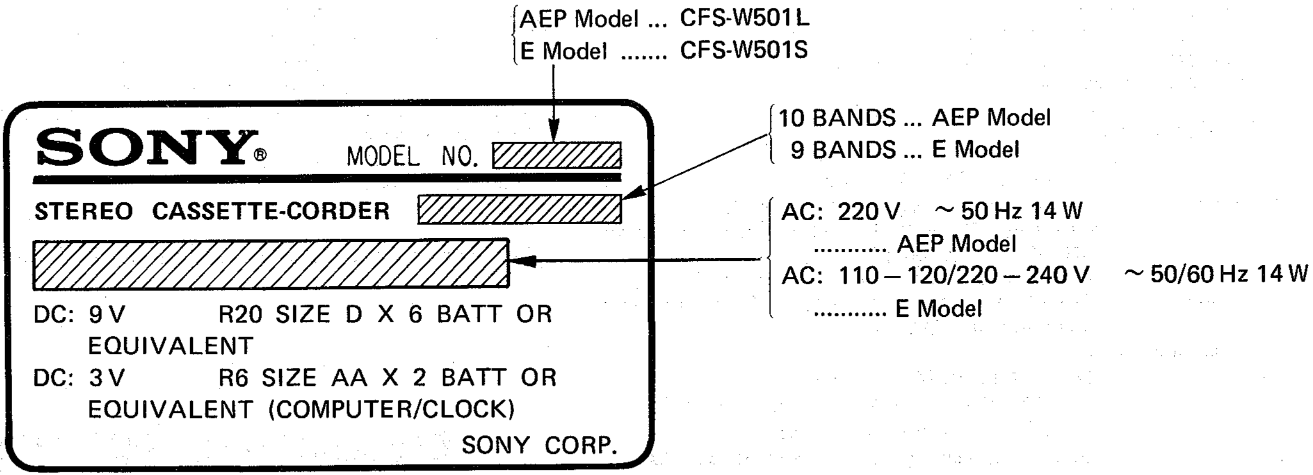
**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

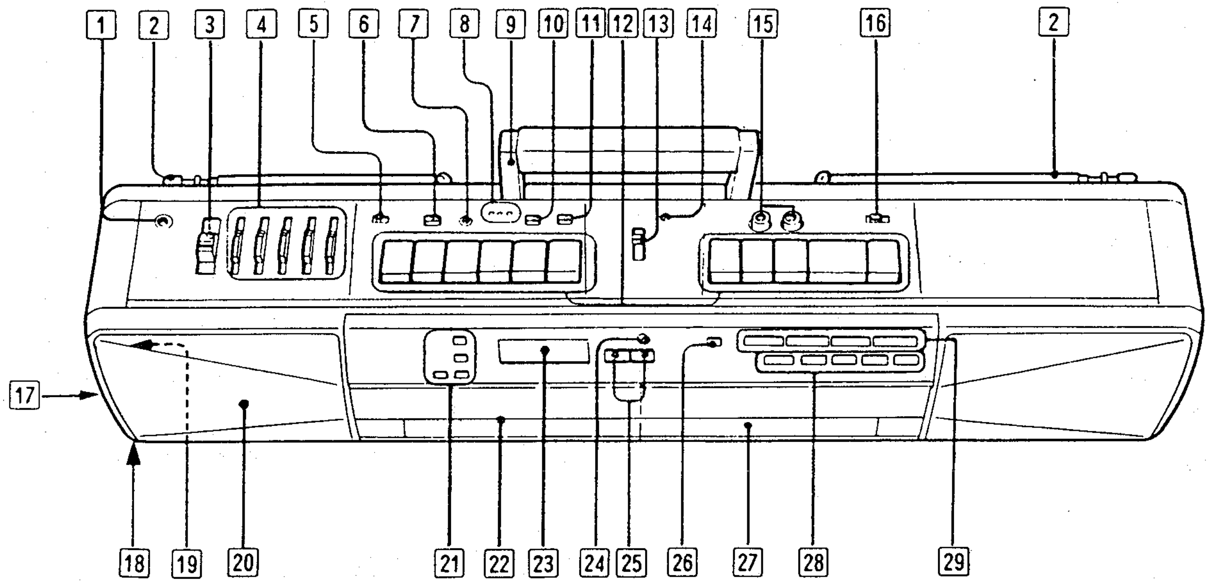
* * *

## MODEL IDENTIFICATION

*– Specification Label –*


AEP Model ... CFS-W501L
E Model ....... CFS-W501S
10 BANDS ... AEP Model
9 BANDS ... E Model
AC: 220 V ~ 50 Hz 14 W
........... AEP Model
AC: 110 – 120/220 – 240 V ~ 50/60 Hz 14 W
........... E Model
SONY
MODEL NO.
STEREO CASSETTE-CORDER
DC: 9 V R20 SIZE D X 6 BATT OR EQUIVALENT
DC: 3 V R6 SIZE AA X 2 BATT OR EQUIVALENT (COMPUTER/CLOCK)
SONY CORP.

## LOCATION AND FUNCTION OF CONTROLS



1 **PHONES (headphones) jack (stereo minijack)**

2 **Telescopic antennas**

3 **VOLUME control**

4 **5-BAND GRAPHIC EQUALIZER controls**
Use to tailor tone response to listening room or listening material.

5 **TIMER/SLEEP switch**

6 **REC MUTE button**
Use to add a silent section during recording.

7 **MIX MIC (external microphone) jack (monaural minijack)**
Minijack to record or mix sound from an external microphone.

8 **MIC (built-in)**

9 **Handle**

10 **TAPE SELECT (PB) selector**
Use during playback to choose between Type I (normal) and Type II/IV ($CrO_2$/metal) tape types.

11 **RADIO/LINE IN selector**

12 **Tape operation buttons**
- II PAUSE
- ◄◄ FF (fast-forward, AMS) button (deck A)
  FF/CUE (fast-forward/cue) button (deck B)
- ►► REW (rewind, AMS) button (deck A)
  REW/REV (rewind/review) button (deck B)
  (note: ◄◄ and ►► do NOT release automatically at tape end.)
- ◄ PLAY button
- ● REC (record) button (deck B only)—Pressing this will automatically depress ◄ PLAY.
- ▲■ STOP/EJECT

13 **FUNCTION selector**
Selects RADIO/LINE IN, TAPE or DUBBING. You can choose NORMAL or HI-SPEED dubbing.

14 **OPR/BATT (operation/battery) indicator**
Shows unit is in use. When glow becomes faint, change all batteries.

15 **LINE IN jacks (left and right phono jacks)**
Allow connection of other component (e.g. CD player).

16 **SENS (sensitivity) (DX/LOCAL) selector**
Normally, set to DX.

17 **AC IN socket**

18 **VOLTAGE SELECTOR (E Model)**

19 **ISS/FM STEREO (Interference suppress/FM stereo-mono) switch (AEP Model)**
Selects between stereo and mono during FM play, and between ISS positions 1 and 2 for MW and LW recording.

20 **Speaker**

21 **Clock/Timer operation buttons**
CLOCK—to set clock
TIMER—to display or set timer-on time.
SLEEP—for timed radio play.
STANDBY—to activate or turn off wake-to-radio, wake-to-alarm.

22 **Cassette holder B**

23 **Clock/tuner display**

24 **FM STEREO indicator**
Lights to show stereo reception. Use to find best tuning.

25 **TIME/SCAN +/– buttons**
For radio tuning, clock/timer setting.

26 **MEMORY button**
To memorize preset radio tuning stations (and to set wake-to-alarm)

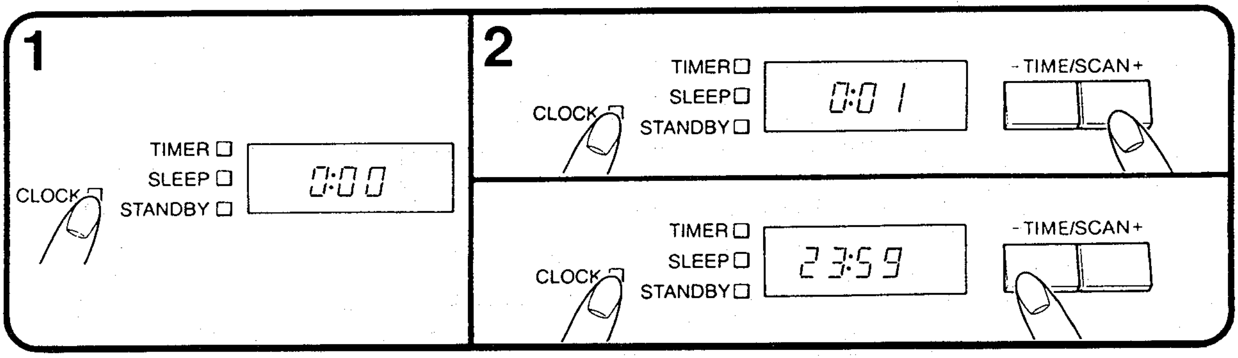
27 **Cassette holder A**

28 **FM/MW/LW/SW PRESET TUNING buttons (AEP Model)**
**FM/MW/SW PRESET TUNING buttons (E Model)**

29 **BAND selector (AEP Model: FM/MW/LW/SW)**
**(E Model: FM/MW/SW)**

## TO SET THE CLOCK

Make sure the FUNCTION selector is set to a position other than RADIO/LINE IN.


1
TIMER ☐
SLEEP ☐
STANDBY ☐
CLOCK
0:00
2
TIMER ☐
SLEEP ☐
STANDBY ☐
CLOCK
0:01
-TIME/SCAN+
TIMER ☐
SLEEP ☐
STANDBY ☐
CLOCK
23:59
-TIME/SCAN+

Hold down CLOCK and...

Press + or –.

**For fast clock advance**
Hold down + or –.

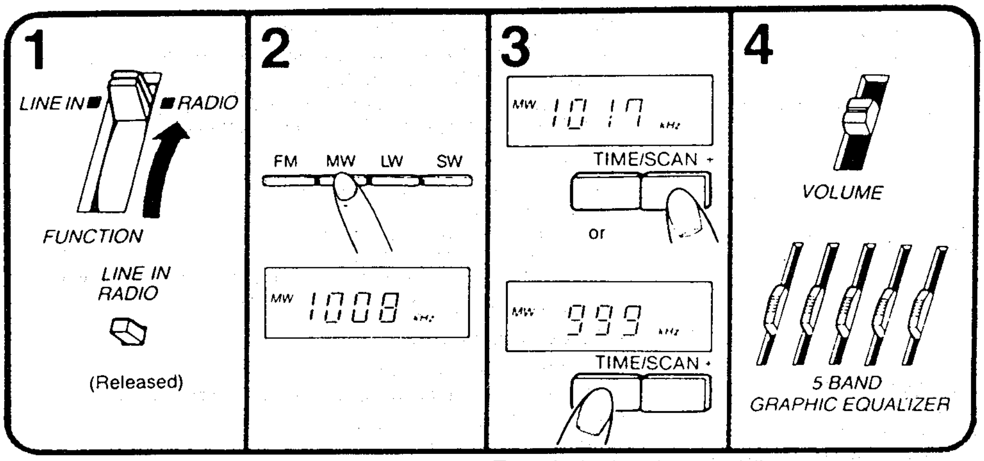
**24-hour time display**
Separate times for AM and PM are not displayed. 1:00 PM is displayed as 13:00. Midnight is displayed as 0:00. Noon is displayed as 12:00.

**To set seconds exactly**
Ex. To set to 7:00 (00 seconds).
Set clock to 6:59, then continue to hold down CLOCK. At a signal indicating the exact hour (eg. a radio broadcast or telephone "time" service) press + once. The clock will be set to exactly 7:00.

## OPERATION OF THE RADIO

### MANUAL TUNING

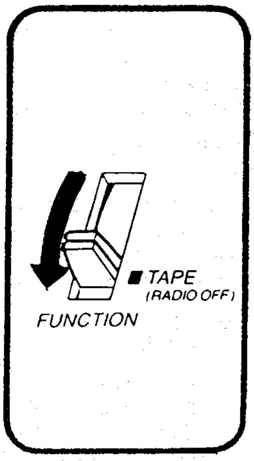
Make sure that TIMER/SLEEP switch is set to OFF.


1
LINE IN ■
■ RADIO
FUNCTION
LINE IN
RADIO
(Released)
2
FM
MW
LW
SW
MW 1008 kHz
3
MW 1017 kHz
TIME/SCAN +
or
MW 999 kHz
TIME/SCAN +
4
VOLUME
5 BAND
GRAPHIC EQUALIZER

Select band.
(LW: AEP Model)

Tune desired station.

Adjust.


■ TAPE
(RADIO OFF)
FUNCTION

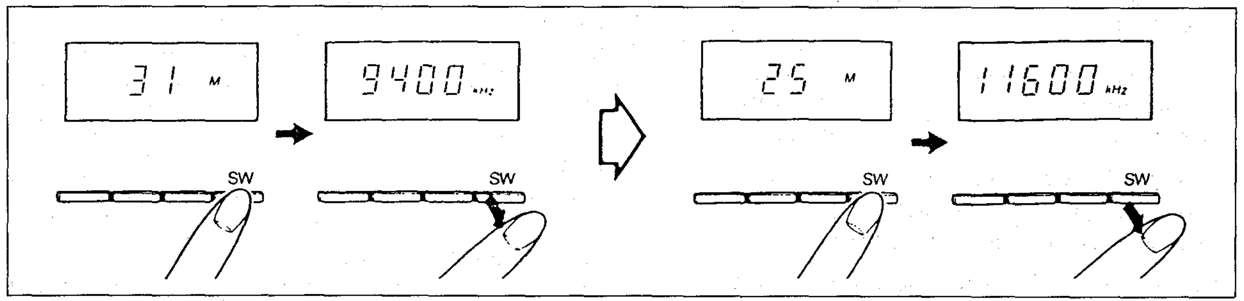
To turn off radio.

**For SW tuning**
There are 7 SW frequency bands (see frequency table).
In step 2 of MANUAL TUNING, if you press SW, the last previously tuned SW-band (eg. 31 m) will be selected. Each time you press SW, the band will advance, (to 25 m , 19 m . . .). First the meter band, then the frequency will be displayed. After 13 m, the 49 m band is selected.

**Table of SW frequency bands**

| Band | Frequencies |
|---|---|
| 49 m | 5.85—6.35 MHz* |
| 41 m | 7.00—7.50 MHz |
| 31 m | 9.40—9.90 MHz |
| 25 m | 11.60—12.10 MHz |
| 19 m | 15.10—15.60 MHz |
| 16 m | 17.55—18.05 MHz |
| 13 m | 21.40—21.90 MHz |

* MHz = kHz × 1000



## AUTO SCAN TUNING

**In step 3 of "MANUAL TUNING," hold down + or – for several seconds, then release.**
A tone will sound.
The tuner will tune in the nearest station in that direction, play for 5 seconds, then move to the next station in the selected direction. This process will repeat.
**When a station you want to listen to is tuned in, press + or – within 5 seconds.**
The tuner will remain tuned to that station.

**When you reach the first or last frequency in a band**
An alarm tone will sound. Press + or – to adjust the tuner in the opposite direction to stop the alarm. (Alarm will not sound if a station is present at the first or last frequency.)

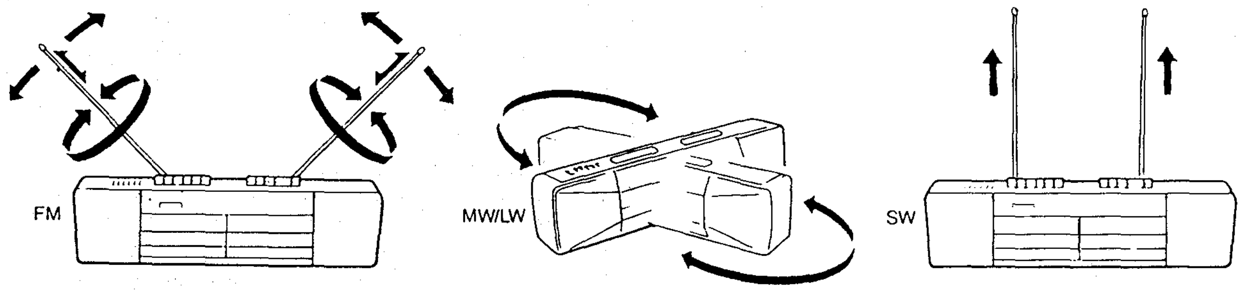
**If tuner stops at frequencies with no station**
This may occur when a broadcast source is nearby. If so, set SENS to LOCAL.

**Note on LW frequency display**
LW frequency assignments are being revised. During auto tuning, frequency displays may be different from the actual frequency tuned. Tuning quality is not affected.

**To eliminate noise when broadcast source is nearby**
Set SENS to LOCAL.

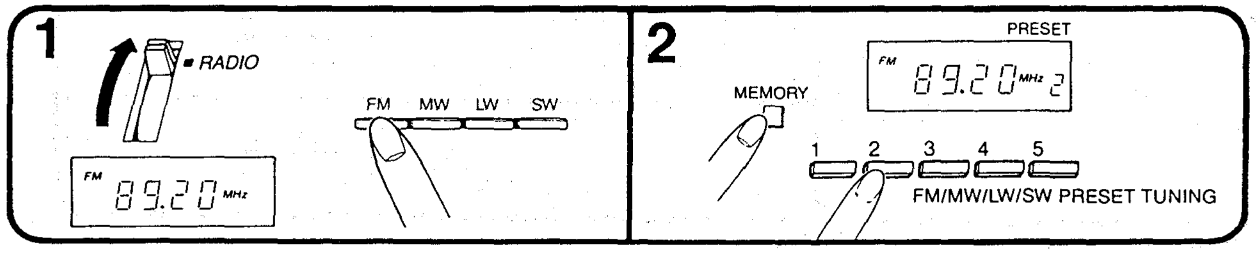
**Graphic equalizer adjustments**
These are the frequency coverages of the equalizer controls.
100 Hz: bass.
400 Hz: speaking voice, middle frequencies of instrumental music.
1 kHz: singing vocals. Boost for increased "presence."
4 kHz: overall brightness of sound.
10 kHz: general treble. Lower to reduce noise.
Raise control to emphasize a frequency band, lower to de-emphasize.

**Antenna adjustment**



## MEMORY PRESET TUNING

**To memorize a preset station**
Ex. To memorize 89.20 MHz FM at preset 2.



Tune.

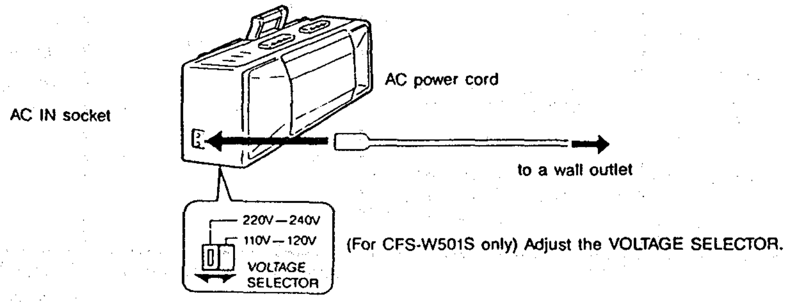
Hold down MEMORY and press 2. 2 will appear.
FM 89.20 MHz is now memorized at preset 2.

**To tune a preset station**
After memorizing in the example above: press FM, then FM/MW/LW/SW (FM/MW/SW) PRESET TUNING 2.
Memorized station FM 89.20 MHz will be tuned.

**How many stations can be preset?**
**CFS-W501L:** one FM, one MW, one SW and one LW station for each FM/MW/LW/SW PRESET TUNING button: a total of 20 preset stations.
**CFS-W501S:** one FM, one MW and one SW station for each FM/MW/SW PRESET TUNING button: a total of 15 preset stations.

**LW frequency revision**
Due to a revision of LW frequency assignments, manual adjustments may be necessary after tuning of a preset station.

## HOUSE CURRENT



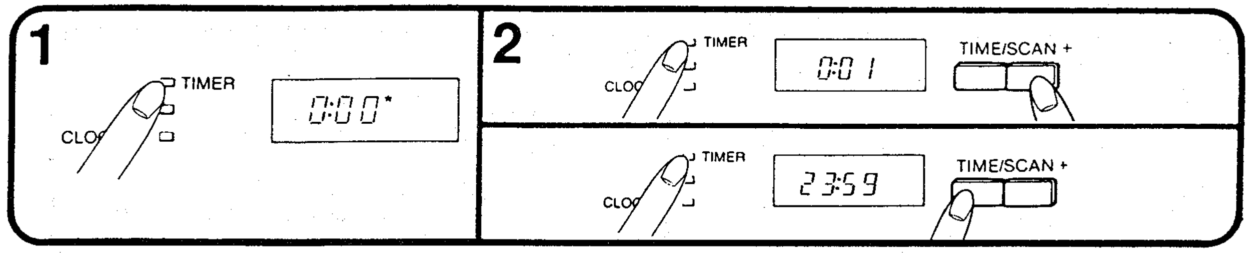
(For CFS-W501S only) Adjust the VOLTAGE SELECTOR.

**For customers supplied with an AC plug adaptor**
Use adaptor if the plug of the AC power cord does not match the outlet.

**Note**
The unit cannot be operated on the internal batteries (if present) when the AC power cord is connected to the unit. You must remove the AC power cord to use battery power.

### TO SET THE TIMER-ON TIME

Make sure the FUNCTION selector is set to a position other than RADIO/LINE IN.


1
TIMER
CLOCK
0:00
2
TIMER
CLOCK
0:01
TIME/SCAN +
TIMER
CLOCK
23:59
TIME/SCAN +

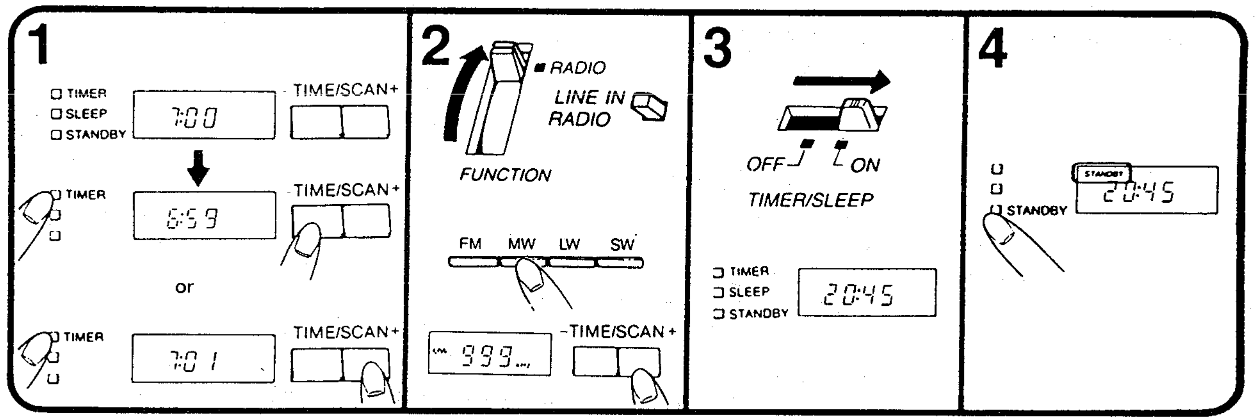
Hold down TIMER and...

Press + or –.

**For fast advance**
Hold down + or –.

**To check timer-on time**
Press TIMER. Timer-on time will be displayed.

### FOR WAKE-TO-RADIO


1
TIMER
SLEEP
STANDBY
7:00
TIME/SCAN+
TIMER
6:59
TIME/SCAN+
or
TIMER
7:01
TIME/SCAN+
2
RADIO
LINE IN
RADIO
FUNCTION
FM MW LW SW
999
–TIME/SCAN +
3
OFF ON
TIMER/SLEEP
TIMER
SLEEP
STANDBY
20:45
4
STANDBY
STANDBY
20:45

Set timer-on time.

Tune.

Present time is displayed.

STANDBY is displayed.
At the timer-on time, radio will play.

## SECTION 1
## ADJUSTMENTS

### 1-1. MECHANICAL ADJUSTMENTS

#### PRECAUTION

1. Clean the following parts. Use a denatured-alcohol-moistened swab for the group A and Sony Pinch Roller Cleaner or a rubber cleaner swab for B.

| | | | |
|---|---|---|---|
| A | record/playback head | B | pinch roller |
| | erase head | | rubber belts |
| | capstan | | idler tire |

2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

### Deck A

**Torque Measurement**

| Mode | Torque meter | Meter reading |
|---|---|---|
| FWD | CQ-102C | 25 – 50 g•cm<br>(0.35 – 0.7 oz•inch) |
| FWD<br>Back Tension | | 2.0 – 5 g•cm<br>(0.03 – 0.07 oz•inch) |
| FF | CQ-201B | more than 85 g<br>(more than 1.18 oz) |
| REW | | 85 – 120 g•cm<br>(1.18 – 1.67 oz•inch) |

**Tape Tension Measurement**

| Mode | Tension meter | Meter reading |
|---|---|---|
| FWD | CQ-403A | more than 170 g<br>(more than 2.36 oz•inch) |

### Deck B

**Torque Measurement**

| Mode | Torque meter | Meter reading |
|---|---|---|
| FWD | CQ-102C | 25 – 50 g•cm<br>(0.35 – 0.69 oz•inch) |
| FWD<br>Back Tension | | 2 – 5 g•cm<br>(0.028 – 0.069 oz•inch) |
| FF | CQ-201B | 65 – 110 g•cm<br>(0.9 – 1.53 oz•inch) |
| REW | | 65 – 110 g•cm<br>(0.9 – to 1.53 oz•inch) |

**Tape Tension Measurement**

| Mode | Tension meter | Meter reading |
|---|---|---|
| FWD | CQ-403A | more than 170 g<br>(more than 2.36 oz) |

### Head Height Adjustment

**Procedures:**

1. DECK A: PB
   DECK B: REC
2. Test Cassette: CQ-009C
3. Viewing from the front, adjust the head heights to eliminate tape curl and tape twist at portions of arrow. If a satisfying result is not provided with only turning the screws, change the adjustment shim or the shim lug.

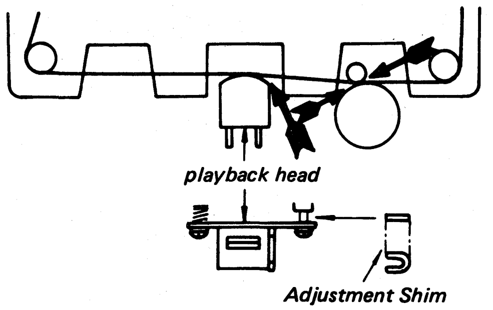
Adjustment Shim

| | |
|---|---|
| 3-578-138-01 | (t = 0.1) |
| 3-578-138-11 | (t = 0.2) |
| 3-578-138-21 | (t = 0.3) |

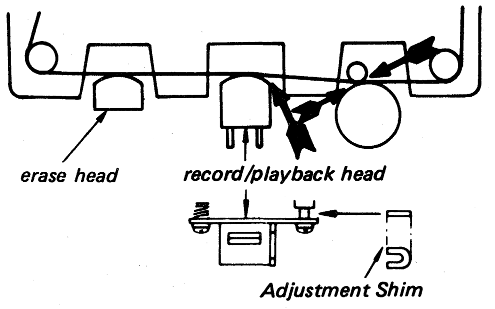
Shim Lug

| | |
|---|---|
| 3-331-108-01 | (t = 0.1) |
| 3-331-108-11 | (t = 0.2) |
| 3-331-108-21 | (t = 0.3) |
| 3-331-108-31 | (t = 0.4) |
| 3-331-108-41 | (t = 0.5) |

**Deck A**


playback head
Adjustment Shim

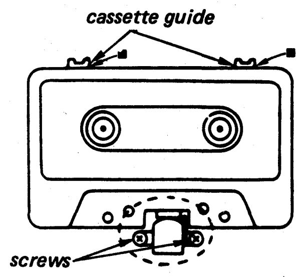
**Deck B**

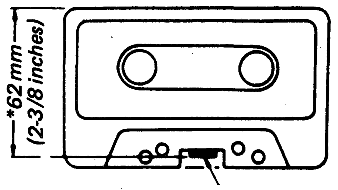

erase head
record/playback head
Adjustment Shim

### REC/PB Head Installation and Position Adjustment

**Procedures:**

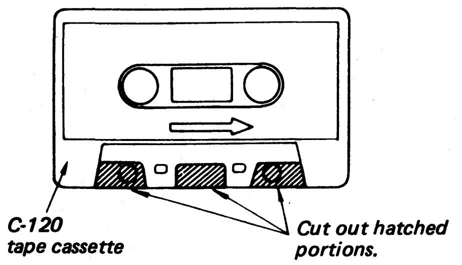
1. Test Cassette: CQ-009C
2. Set the cassette tape into the set and install the head with the screws so that the edge of the head is in contact with the spacer when pressing the FWD button and FF button or the FWD button and REW button at the same time. (At this time, the portion marked by ■ is in contact with the cassette). Then, adjust the REC/PB head Azimuth Adjustment and apply locking compound to an installation screw.


cassette guide
screws

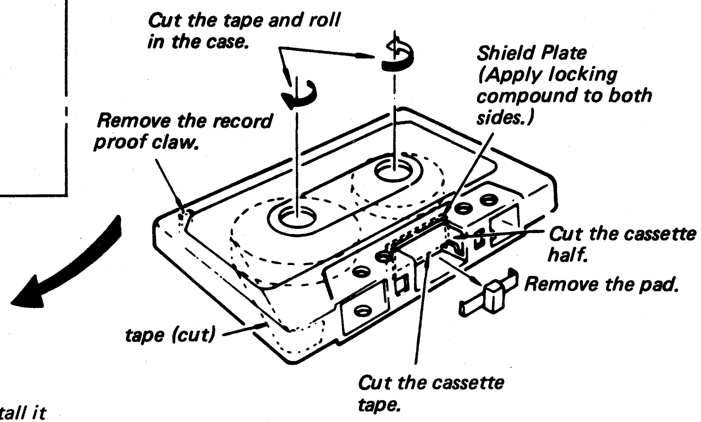

*62 mm (2-3/8 inches)

*Spacer: Prepare a suitable material and install it so that distance marked by * is 62mm (2-3/8 inches) and apply locking compound.*

**Note:** If the Test Cassette CQ-009C is not available prepare adjustment cassettes as shown below.
(A) For the Head Height Adjustment.


C-120
tape cassette
Cut out hatched portions.

(B) For the REC/PB Head installation and Position Adjustment.


Cut the tape and roll in the case.
Shield Plate (Apply locking compound to both sides.)
Remove the record proof claw.
Cut the cassette half.
Remove the pad.
tape (cut)
Cut the cassette tape.

## 1-2. TAPE RECORDER SECTION ELECTRICAL ADJUSTMENTS

**Note:** The adjustment should be performed in the order given in this service manual. The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.

| | |
|---|---|
| FUNCTION: | TAPE (RADIO OFF) |
| VOLUME: | mechanical mid |
| GEQ: | mechanical mid |

- Standard Input Level

| Input terminal | MIC IN | LINE IN |
|---|---|---|
| source impedance | 300 Ω | 10 kΩ |
| input level | 0.77 mV<br>(-60 dB)<br>MIC: -46 dB | 0.43 V<br>(-5 dB) |

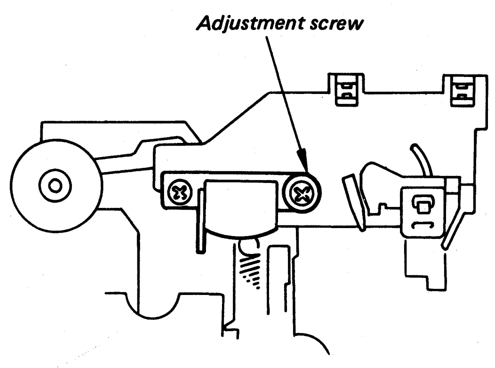
- Standard Output Level

| Output terminal | PHONES | Speaker |
|---|---|---|
| load impedance | 32 Ω | 3.2 Ω |
| output level | 0.25 V (-10 dB) | 0.775 V (0 dB) |

**Test tape:**

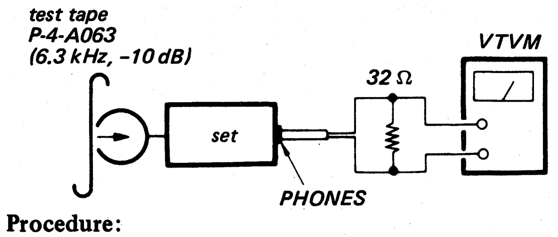
| Type | Signal | Used for |
|---|---|---|
| P-4-A063 | 6.3 kHz, -10 dB | Azimuth Adjustment |
| WS-48A | 3 kHz, 0 dB | Tape Speed Adjustment |

**Deck A**
**Deck B**


Adjustment screw

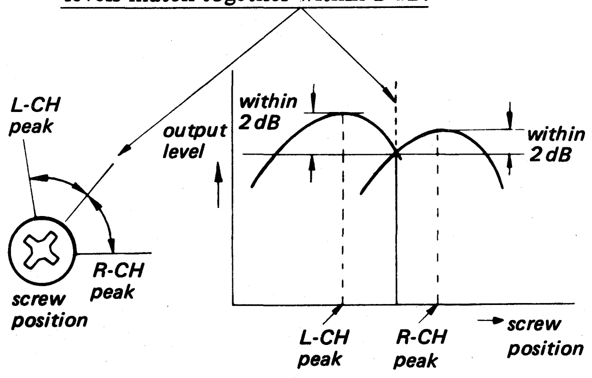
### Record/playback Head Azimuth Adjustment

**Setting:**


test tape
P-4-A063
(6.3 kHz, -10 dB)
VTVM
32 Ω
set
PHONES

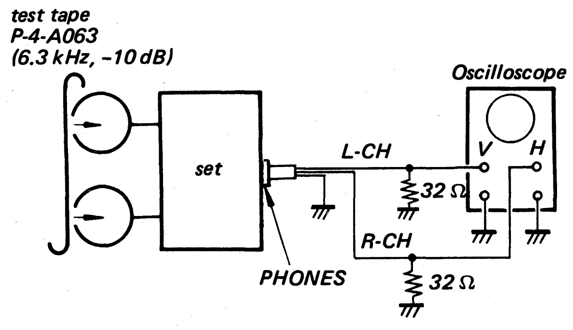
**Procedure:**

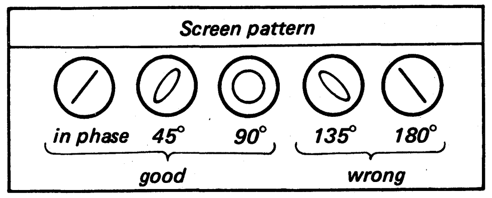
1. Mode: FWD playback
2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 2 dB.



3. Phase Check

   Mode: playback

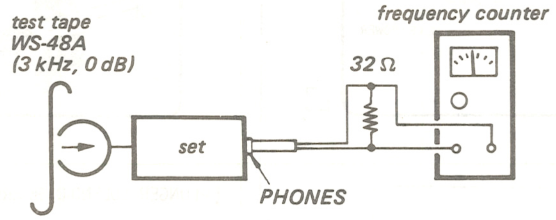

test tape
P-4-A063
(6.3 kHz, -10 dB)
Oscilloscope
set
L-CH
V
H
32 Ω
R-CH
PHONES
32 Ω


Screen pattern
in phase
45°
90°
135°
180°
good
wrong

### Tape Speed Adjustment (for both decks A and B)

**Setting:**

Mode: Playback


test tape
WS-48A
(3 kHz, 0 dB)
frequency counter
32 Ω
set
PHONES

Specification (in the middle of the tape):

| | Frequency counter |
|---|---|
| High speed | 5970 ± 10 Hz |
| Normal speed | 2985 ± 5 Hz |

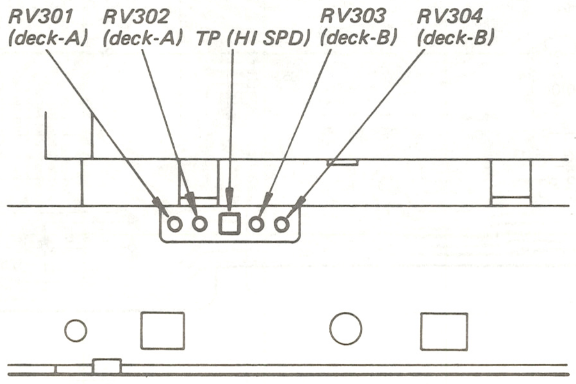
Frequency difference between the beginning and the end of the tape should be within ±1.5% (45 Hz).

**Procedure:**

1. Short the jumpers of TP (HI SPD).
   (It results in high speed mode.)
2. Insert WS-48A in deck-A (deck-B) and put into playback mode.
3. Adjust RV301 (RV304) for the specified reading on the frequency counter or the speed checker.
4. Open TP (HI SPD).
   (It results in normal speed mode.)
5. Insert WS-48A in deck-A (deck-B) and put into playback mode.
6. Adjust RV302 (RV303) for the specified reading on the frequency counter or the speed checker.

**Note:** Be sure to perform the high speed adjustment at first.

**Adjustment Location:** MAIN board


RV301 (deck-A)
RV302 (deck-A)
TP (HI SPD)
RV303 (deck-B)
RV304 (deck-B)

*(Rear side of the set: the battery cover is removed.)*

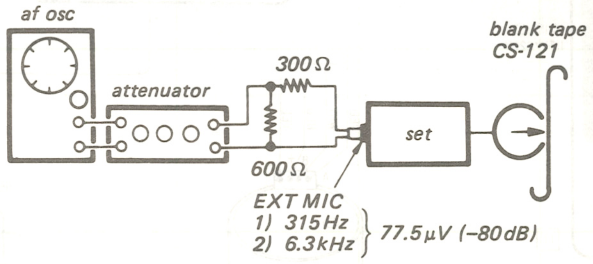
### Record Bias Adjustment

**Setting:**

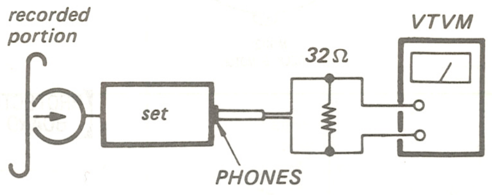
GEQ: mechanical mid
FUNCTION: TAPE (RADIO OFF)

**Procedure:**

1. Mode: record

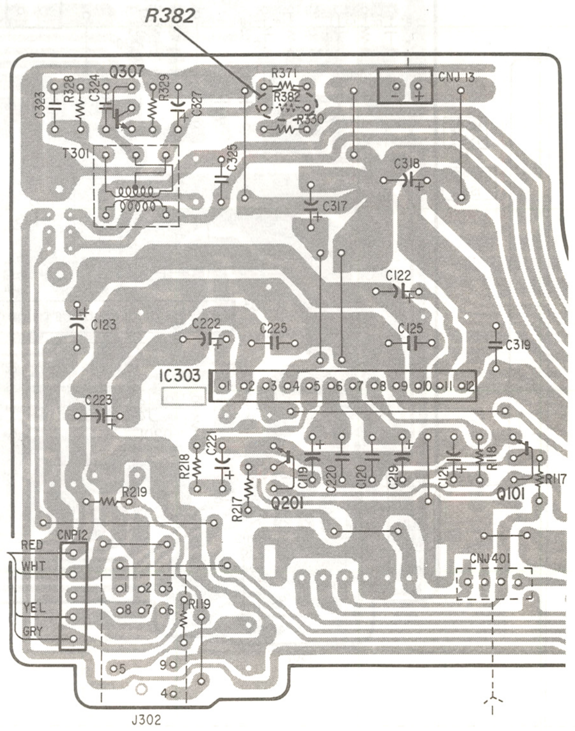

af osc
attenuator
300 Ω
600 Ω
set
blank tape
CS-121
EXT MIC
1) 315 Hz
2) 6.3 kHz
77.5 μV (–80 dB)

2. Mode: playback


recorded portion
set
32 Ω
VTVM
PHONES

3. Confirm that the 6.3 kHz playback signal level is 0 ±3 dB relative to the 315 Hz signal.
   If necessary, adjust by connecting or disconnecting R382.

**Adjustment Location:** MAIN board

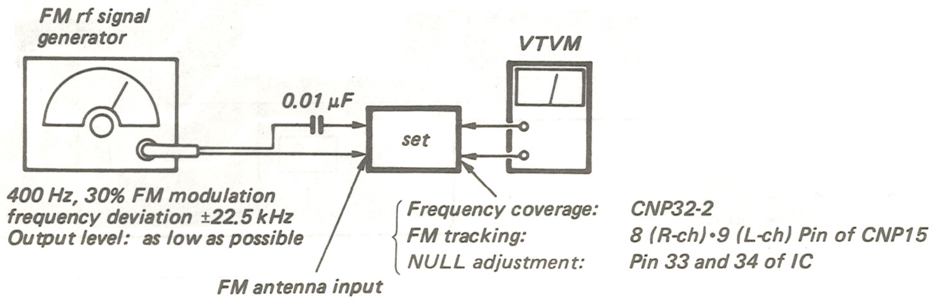

R382
Q307
R371
R330
CNJ13
C323
C324
T301
C305
C327
C318
C317
C122
C123
C222
C225
C125
C319
IC303
C223
R218
C221
R219
R217
Q201
C220
C219
C121
R118
R117
Q101
CNP12
RED
WHT
YEL
GRY
CNP401
J302

## 1-3. RADIO SECTION ELECTRICAL ADJUSTMENTS

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be completed by the (cores of the) coils.

### FM SECTION

FUNCTION: RADIO
BAND: FM

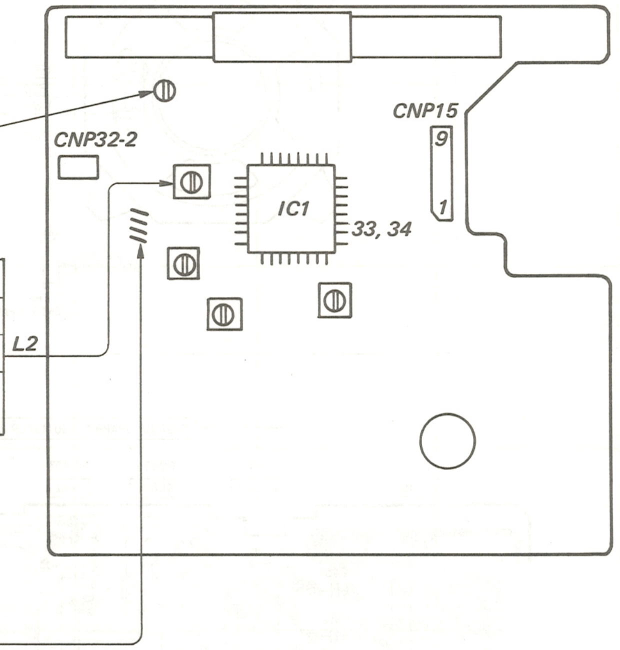

FM rf signal generator
0.01 μF
set
VTVM
400 Hz, 30% FM modulation
frequency deviation ±22.5 kHz
Output level: as low as possible
FM antenna input
Frequency coverage: CNP32-2
FM tracking: 8 (R-ch)•9 (L-ch) Pin of CNP15
NULL adjustment: Pin 33 and 34 of IC

| NULL ADJUSTMENT | |
|---|---|
| Adjust until the reading of the VTVN will be 0. | |
| 92 MHz (55 dB) | CT3 |

| FM FREQUENCY COVERAGE ADJUSTMENT | | |
|---|---|---|
| Adjust for the specified reading on the VTVM. | | |
| 108 MHz | 8.0 ±0.1 V | L2 |
| Tune to 87.5 MHz and confirm that the reading on the VTVM is 4.5 ±0.2 V. | | |

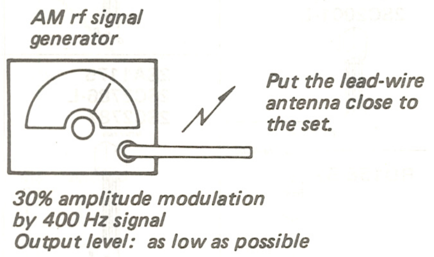
| FM TRACKING ADJUSTMENT | |
|---|---|
| Adjust for a maximum reading on the VTVM. | |
| 87.5 MHz | L1 |

TUNER BOARD (COMPONENT SIDE)

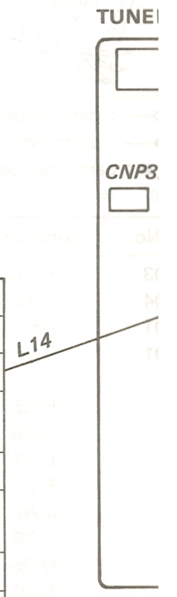

CT3
L2
L1
CNP32-2
CNP15
9
1
IC1
33, 34

### AM SECTION

FUNCTION: RADIO
BAND: AM


AM rf signal generator
Put the lead-wire antenna close to the set.
30% amplitude modulation by 400 Hz signal
Output level: as low as possible

| AM COVERAGE ADJUSTMENT | | |
|---|---|---|
| LW (AEP Model) | | |
| 153 kHz | 1.2 ± 0.1 V | L14 |
| Adjust for the specified reading on VTVM. | | |
| MW (E Model) | | |
| Adjust for the specified reading on VTVM. | | |
| 531 kHz | 1.39 ± 0.1 V | L14 |
| After LW/MW adjustment tune to the following frequency and confirm that the reading on the VTVM satisfies the specification. | | |
| 21.9 MHz (SW) | 7.15 ± 0.2 V | |



B)

counter

ning and
5 Hz).

put into

ed read-
e speed

put into

ed read-
e speed

ment at

ed.)

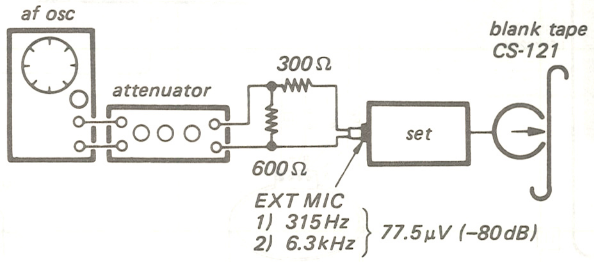
### Record Bias Adjustment

**Setting:**

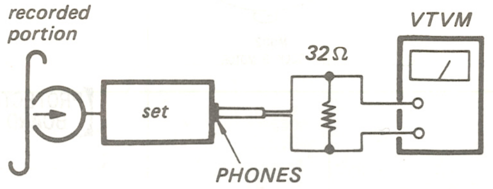
GEQ: mechanical mid
FUNCTION: TAPE (RADIO OFF)

**Procedure:**

1. Mode: record

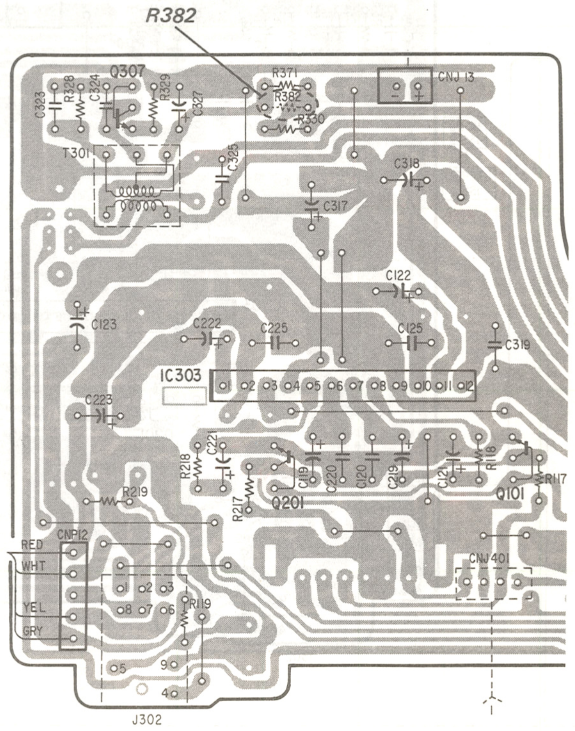

af osc
attenuator
300Ω
600Ω
blank tape
CS-121
set
EXT MIC
1) 315 Hz
2) 6.3 kHz
77.5 µV (–80 dB)

2. Mode: playback


recorded
portion
set
32Ω
VTVM
PHONES

3. Confirm that the 6.3 kHz playback signal level is 0 ±3 dB relative to the 315 Hz signal.
   If necessary, adjust by connecting or disconnecting R382.

**Adjustment Location:** MAIN board

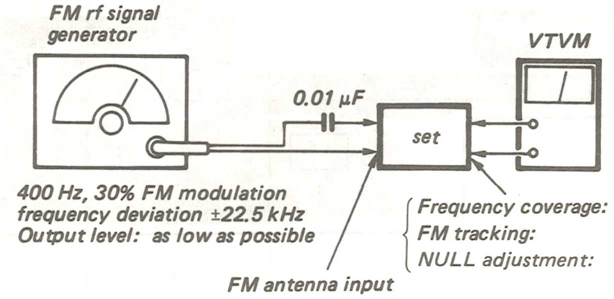

R382
Q307
R371
C318
C317
C122
C123
C222
C225
C125
C319
IC303
C223
C221
R218
R219
R217
Q201
Q101
R117
CNP12
RED
WHT
YEL
GRY
CNJ401
R119
J302

## 1-3. RADIO SECTION ELECTRICAL ADJUSTMENTS

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be completed by the (cores of the) coils.

### FM SECTION

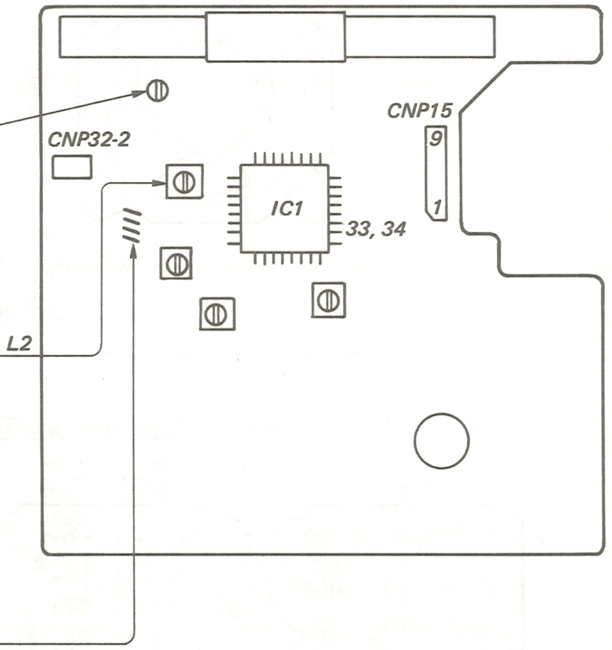
FUNCTION: RADIO
BAND: FM


FM rf signal
generator
0.01 µF
set
VTVM
FM antenna input

*400 Hz, 30% FM modulation*
*frequency deviation ±22.5 kHz*
*Output level: as low as possible*

*Frequency coverage:* *CNP32-2*
*FM tracking:* *8 (R-ch)•9 (L-ch) Pin of CNP15*
*NULL adjustment:* *Pin 33 and 34 of IC*

TUNER BOARD (COMPONENT SIDE)


CT3
CNP32-2
CNP15
9
1
IC1
33, 34
L2
L1

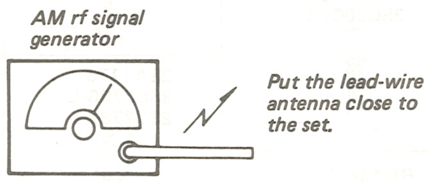
| NULL ADJUSTMENT | |
|---|---|
| Adjust until the reading of the VTVN will be 0. | |
| 92 MHz (55 dB) | CT3 |

| FM FREQUENCY COVERAGE ADJUSTMENT | | |
|---|---|---|
| Adjust for the specified reading on the VTVM. | | |
| 108 MHz | 8.0 ±0.1 V | L2 |
| Tune to 87.5 MHz and confirm that the reading on the VTVM is 4.5 ±0.2 V. | | |

| FM TRACKING ADJUSTMENT | |
|---|---|
| Adjust for a maximum reading on the VTVM. | |
| 87.5 MHz | L1 |

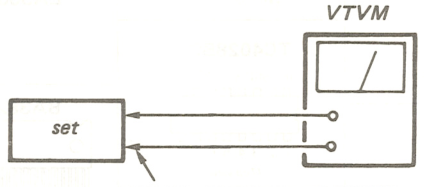
### AM SECTION

FUNCTION: RADIO
BAND: AM


AM rf signal
generator

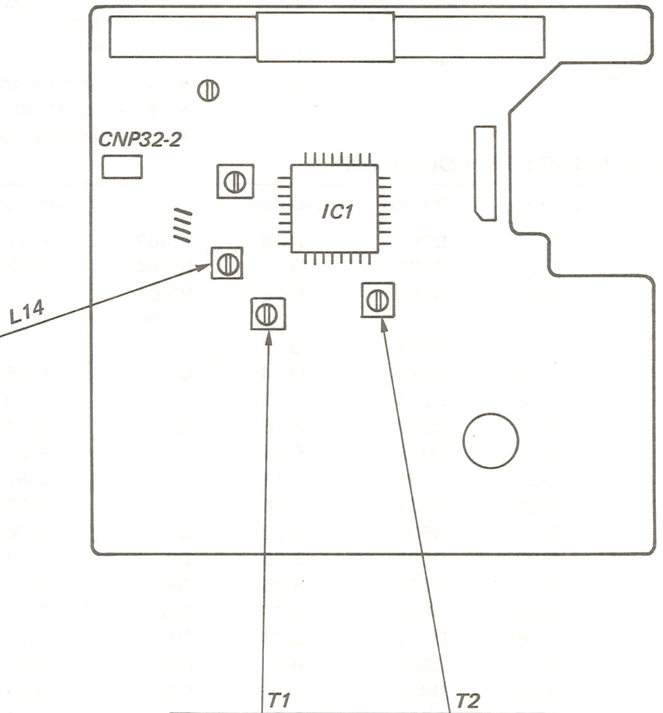
*Put the lead-wire antenna close to the set.*

*30% amplitude modulation*
*by 400 Hz signal*
*Output level: as low as possible*



*AM IF: 8 or 9 pin of CNP15*
*AM coverage: CNP32-2*

TUNER BOARD (COMPONENT SIDE)

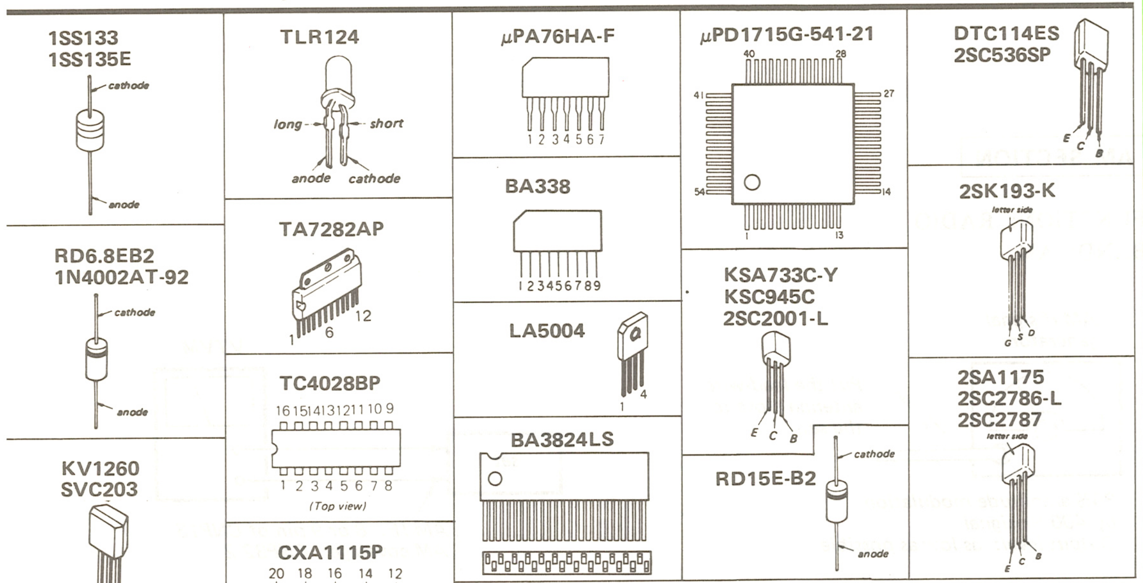
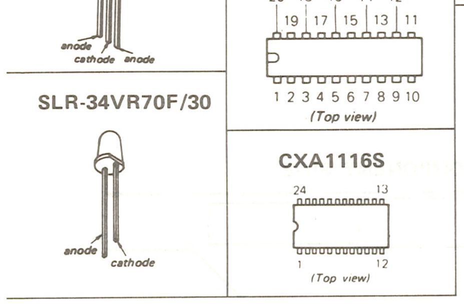

CNP32-2
IC1
L14
T1
T2

| AM COVERAGE ADJUSTMENT | | |
|---|---|---|
| LW (AEP Model) | | |
| 153 kHz | 1.2 ± 0.1 V | L14 |
| Adjust for the specified reading on VTVM. | | |
| MW (E Model) | | |
| Adjust for the specified reading on VTVM. | | |
| 531 kHz | 1.39 ± 0.1 V | L14 |
| After LW/MW adjustment tune to the following frequency and confirm that the reading on the VTVM satisfies the specification. | | |
| 21.9 MHz (SW) | 7.15 ± 0.2 V | |

| T1 | T2 |
|---|---|
| Adjust for a maximum reading and a flat passing characteristic. | |
| AM IF ADJUSTMENT | |

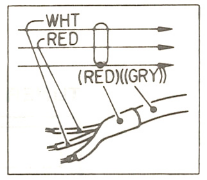
# SECTION 2 DIAGRAMS

- Semiconductor Lead Layouts.



1SS133
1SS135E
cathode
anode
TLR124
long
short
anode
cathode
µPA76HA-F
1 2 3 4 5 6 7
µPD1715G-541-21
40
28
27
41
54
14
1
13
DTC114ES
2SC536SP
E C B
RD6.8EB2
1N4002AT-92
cathode
anode
TA7282AP
1
6
12
BA338
1 2 3 4 5 6 7 8 9
KSA733C-Y
KSC945C
2SC2001-L
E C B
2SK193-K
letter side
G S D
LA5004
1
4
TC4028BP
16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
(Top view)
BA3824LS
RD15E-B2
cathode
anode
2SA1175
2SC2786-L
2SC2787
letter side
E C B
KV1260
SVC203
anode
cathode
anode
CXA1115P
20 18 16 14 12
19 17 15 13 11
1 2 3 4 5 6 7 8 9 10
(Top view)
SLR-34VR70F/30
anode
cathode
CXA1116S
24
13
1
12
(Top view)

Note

- Color code of sleeving over the end of the jacket.

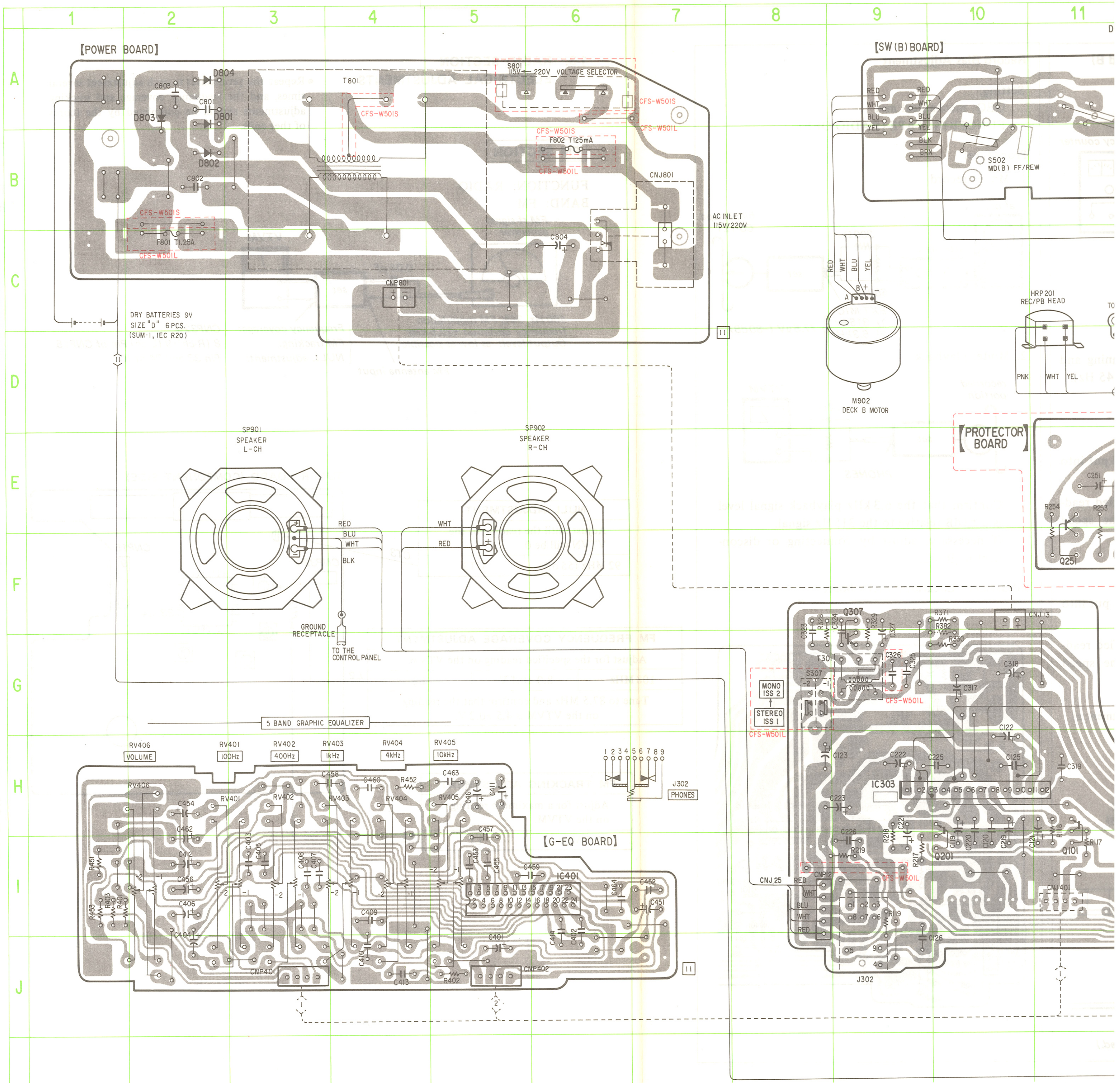

WHT
RED
(RED)(GRY)

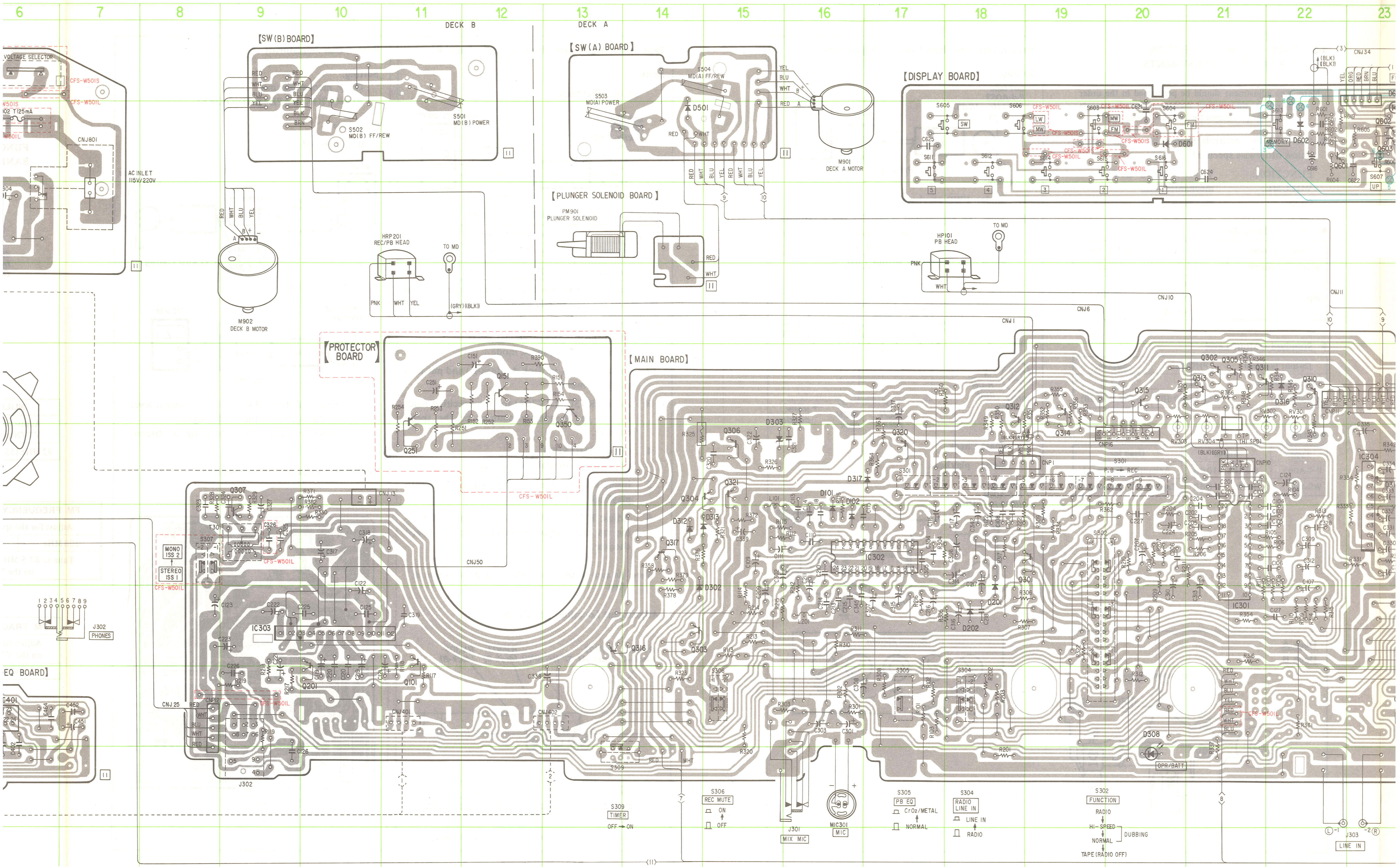
- ○— : parts extracted from the component side.
- ●— : parts extracted from the conductor side.
- ■ : part mounted on the conductor side.
- ⊗ : Through hole.

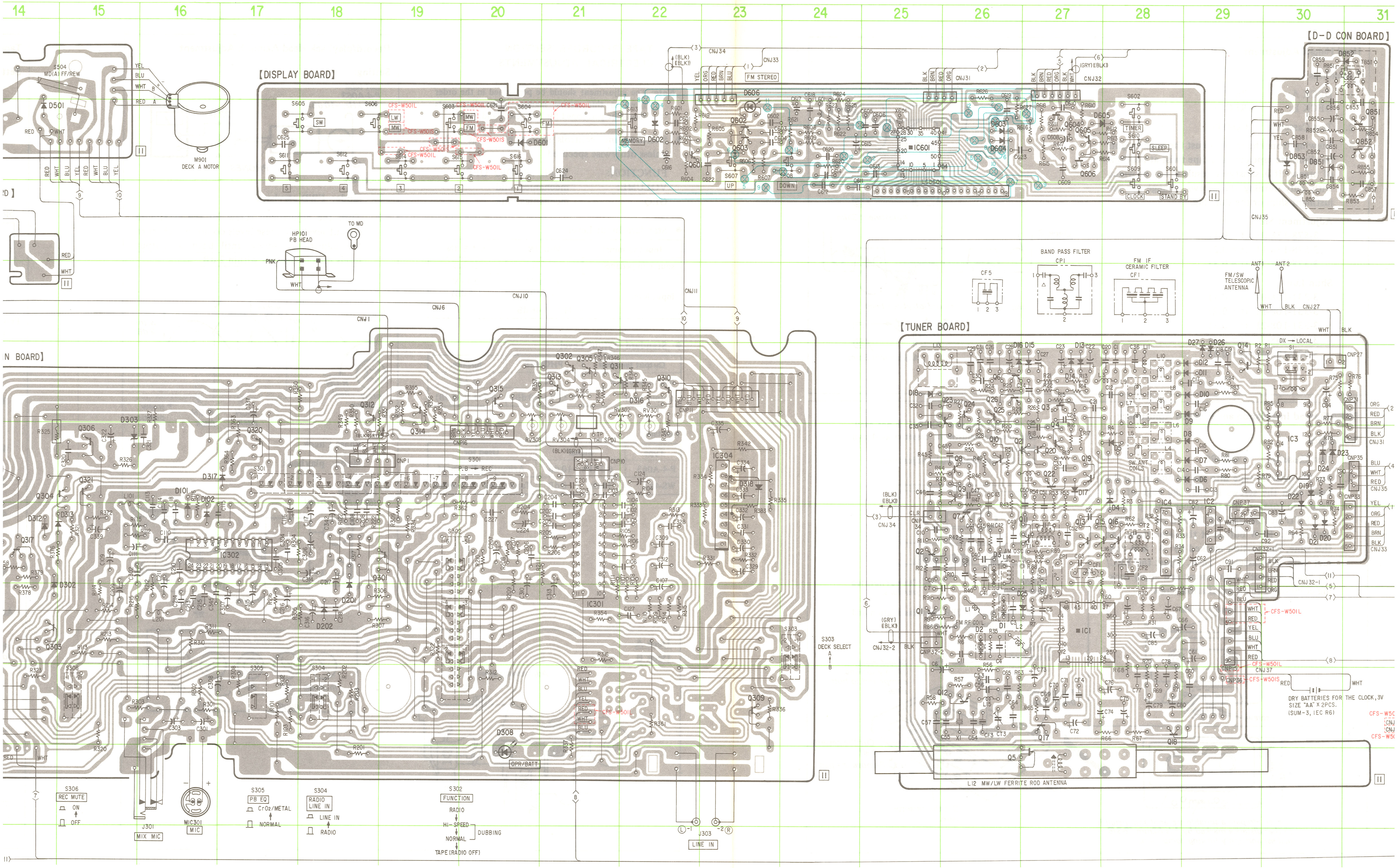
## SEMICONDUCTOR LOCATIONS

| Ref. No. | Location | Ref. No. | Location | Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|---|---|---|---|
| D1 | H-26 | D202 | H-18 | IC303 | H-10 | Q26 | E-26 |
| D2 | H-26 | D302 | G-14 | IC304 | F-23 | Q101 | H-11 |
| D3 | G-26 | D303 | F-15 | IC401 | I-5 | Q151 | E-12 |
| D4 | F-27 | D308 | J-20 | IC601 | B-25 | Q201 | I-9 |
| D5 | F-27 | D312 | G-14 | | | Q251 | F-11 |
| D6 | F-28 | D313 | G-14 | Q1 | H-25 | Q301 | G-18 |
| D7 | F-28 | D316 | E-22 | Q2 | G-25 | Q302 | E-21 |
| D8 | E-28 | D317 | F-16 | Q3 | E-27 | Q303 | H-14 |
| D9 | E-28 | D318 | F-23 | Q4 | F-27 | Q304 | F-14 |
| D10 | E-28 | D501 | B-14 | Q5 | J-26 | Q305 | E-21 |
| D11 | E-28 | D601 | B-20 | Q6 | E-26 | Q306 | F-15 |
| D12 | E-28 | D602 | B-22 | Q7 | G-26 | Q307 | F-9 |
| D13 | E-27 | D603 | B-26 | Q8 | F-26 | Q309 | I-23 |
| D14 | E-27 | D604 | B-26 | Q9 | F-25 | Q310 | E-22 |
| D15 | E-26 | D605 | B-27 | D10 | F-26 | Q311 | E-21 |
| D16 | E-26 | D606 | B-23 | Q11 | G-26 | Q312 | E-18 |
| D17 | F-27 | D801 | A-2 | Q12 | I-26 | Q313 | E-21 |
| D18 | E-25 | D802 | B-2 | Q13 | G-27 | Q314 | E-19 |
| D19 | F-30 | D803 | A-2 | Q14 | E-29 | Q315 | E-20 |
| D20 | G-30 | D804 | A-2 | Q15 | G-27 | Q316 | H-13 |
| D21 | G-30 | D851 | B-30 | Q16 | G-27 | Q317 | G-14 |
| D22 | F-30 | D852 | A-30 | Q17 | I-27 | Q320 | F-17 |
| D23 | F-30 | D853 | B-30 | Q18 | I-28 | Q321 | F-15 |
| D24 | F-30 | | | Q19 | F-27 | Q350 | E-13 |
| D25 | H-26 | IC1 | H-27 | Q20 | F-27 | Q601 | B-22 |
| D26 | E-29 | IC2 | G-29 | Q21 | F-26 | Q602 | B-23 |
| D27 | E-29 | IC3 | F-30 | Q22 | F-27 | Q603 | B-23 |
| D101 | G-16 | IC4 | G-28 | Q23 | E-25 | Q604 | B-27 |
| D102 | G-16 | IC301 | G-21 | Q24 | E-26 | Q605 | B-27 |
| D201 | G-18 | IC302 | G-16 | Q25 | E-26 | Q606 | B-27 |
| | | | | | | Q851 | B-31 |
| | | | | | | Q852 | B-31 |

## 2-1. MOUNTING DIAGRAM


1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
[POWER BOARD]
S801 115V 220V VOLTAGE SELECTOR
T801
D801
D802
D803
D804
C801
C802
C803
C804
F801 T1.25A
F802 T125mA
CFS-W501S
CFS-W501L
CNJ801
CNP801
AC INLET 115V/220V
DRY BATTERIES 9V
SIZE "D" 6 PCS.
(SUM-1, IEC R20)
[SW (B) BOARD]
RED
WHT
BLU
YEL
BLK
BRN
S502 MD(B) FF/REW
M902
DECK B MOTOR
HRP201
REC/PB HEAD
PNK
[PROTECTOR BOARD]
C251
R254
R253
Q251
SP901
SPEAKER
L-CH
SP902
SPEAKER
R-CH
GROUND RECEPTACLE
TO THE CONTROL PANEL
5 BAND GRAPHIC EQUALIZER
RV406
VOLUME
RV401
100Hz
RV402
400Hz
RV403
1kHz
RV404
4kHz
RV405
10kHz
[G-EQ BOARD]
IC401
CNP401
CNP402
J302
PHONES
MONO
ISS 2
STEREO
ISS 1
S307
Q307
IC303
Q201
Q101
CNJ13
CNJ25
CNJ401
T301


6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
DECK B
DECK A
[SW(B) BOARD]
[SW(A) BOARD]
[DISPLAY BOARD]
[PLUNGER SOLENOID BOARD]
[PROTECTOR BOARD]
[MAIN BOARD]
EQ BOARD]
VOLTAGE SELECTOR
CFS-W501S
CFS-W501L
T125mA
CNJ801
AC INLET 115V/220V
S501 MD(B) POWER
S502 MD(B) FF/REW
S503 MD(A) POWER
S504 MD(A) FF/REW
D501
M901 DECK A MOTOR
M902 DECK B MOTOR
PM901 PLUNGER SOLENOID
HRP201 REC/PB HEAD
HP101 PB HEAD
TO MD
(GRY)(BLK)
PNK
WHT
YEL
RED
BLU
BLK
BRN
ORG
CNJ1
CNJ6
CNJ10
CNJ11
CNJ13
CNJ25
CNJ34
CNJ50
CNJ401
CNJ402
MEMORY
D601
D602
Q602
Q603
S605
S606
S603
S604
S611
S612
S614
S615
S616
S613
S607 UP
C624
C625
LW
MW
FM
SW
Q151
Q251
Q350
R390
C151
C251
MONO ISS 2
STEREO ISS 1
S307
1 2 3 4 5 6 7 8 9
J302 PHONES
C401
C451
C452
IC301
IC302
IC303
IC304
Q301
Q302
Q303
Q304
Q305
Q306
Q307
Q310
Q311
Q312
Q313
Q314
Q315
Q316
Q317
Q320
Q321
Q101
Q201
D101
D102
D201
D202
D302
D303
D308
D312
D313
D316
D317
CNP1
CNP10
CNP11
CNP16
RV301
RV302
RV303
RV304
TP (HI SPD)
S301 P.B → REC
S302
S304
S305
S306
S308
S309
J301
J303
MIC301
OPR/BATT
S309 TIMER OFF → ON
S306 REC MUTE ON OFF
J301 MIX MIC
MIC301 MIC
S305 PB EQ CrO2/METAL NORMAL
S304 RADIO LINE IN LINE IN RADIO
S302 FUNCTION RADIO HI-SPEED NORMAL DUBBING TAPE (RADIO OFF)
J303 LINE IN
L-1
-2 R


14
15
16
17
18
19
20
21
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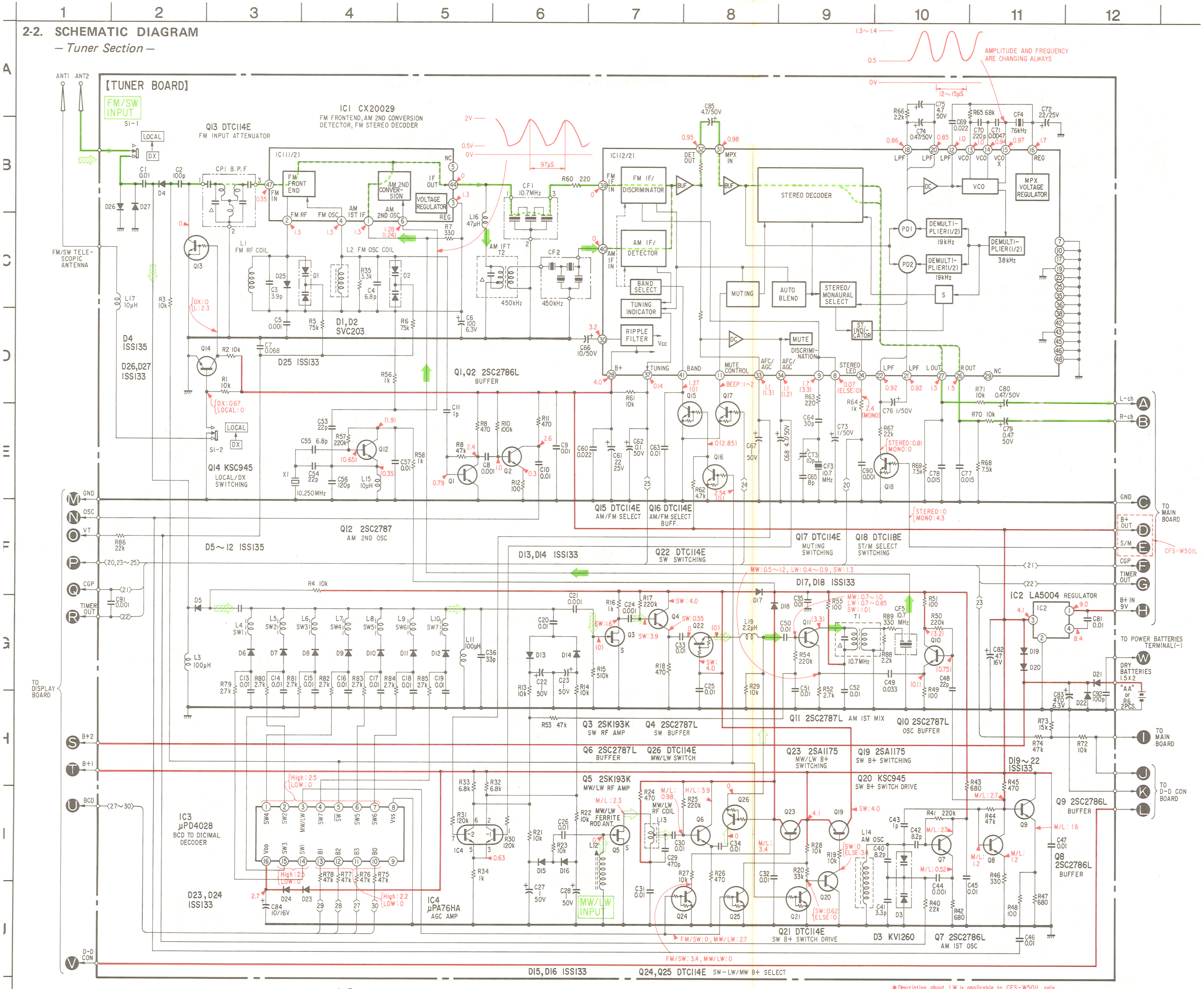
26
27
28
29
30
31
[DISPLAY BOARD]
[D-D CON BOARD]
[TUNER BOARD]
N BOARD]
S504 MD(A) FF/REW
M901 DECK A MOTOR
HP101 PB HEAD
TO MD
BAND PASS FILTER
FM IF CERAMIC FILTER
FM/SW TELESCOPIC ANTENNA
L12 MW/LW FERRITE ROD ANTENNA
DRY BATTERIES FOR THE CLOCK, 3V SIZE "AA" X 2PCS. (SUM-3, IEC R6)
S306 REC MUTE
ON
OFF
J301 MIX MIC
MIC301 MIC
S305 PB EQ
CrO2/METAL
NORMAL
S304 RADIO LINE IN
LINE IN
RADIO
S302 FUNCTION
RADIO
HI-SPEED
NORMAL
DUBBING
TAPE (RADIO OFF)
J303 LINE IN
S303 DECK SELECT
OPR/BATT
MEMORY
FM STEREO
TIMER
SLEEP
CLOCK
STAND BY
UP
DOWN
CFS-W501L
CFS-W501S
IC601
IC301
IC302
IC304
IC1
IC2
IC3
IC4

## 2-2. SCHEMATIC DIAGRAM

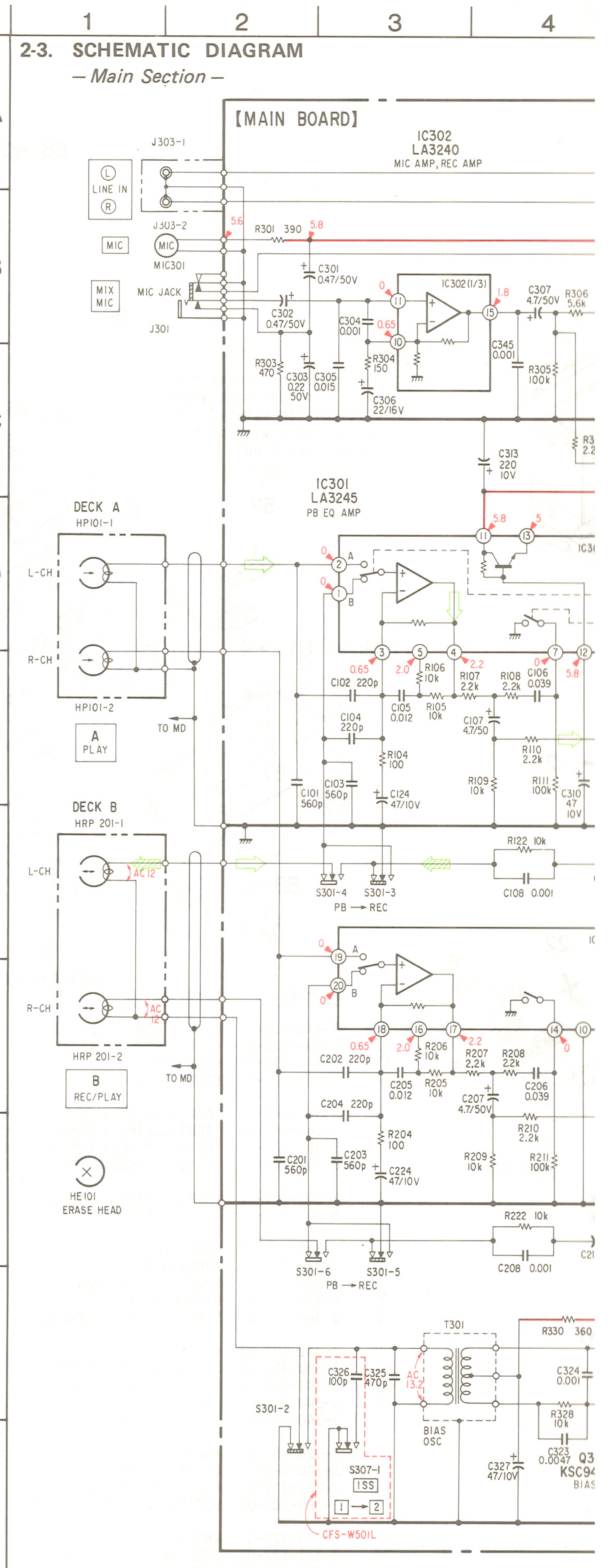
*— Tuner Section —*

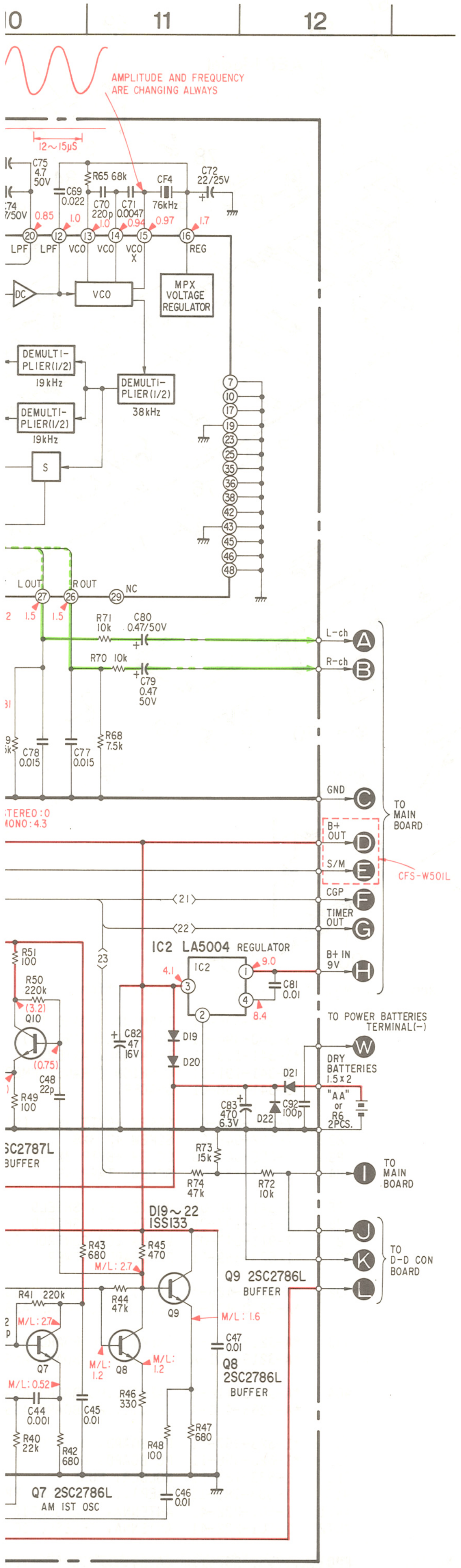

[TUNER BOARD]
ANT1 ANT2
FM/SW TELESCOPIC ANTENNA
FM/SW INPUT
S1-1
LOCAL DX
Q13 DTC114E FM INPUT ATTENUATOR
IC1 CX20029 FM FRONTEND, AM 2ND CONVERSION DETECTOR, FM STEREO DECODER
IC1(1/2)
IC1(2/2)
CP1 B.P.F
FM FRONT END
AM 2ND CONVERSION
VOLTAGE REGULATOR
CF1 10.7MHz
CF2 450kHz
AM IFT T2
FM IF/DISCRIMINATOR
AM IF/DETECTOR
BAND SELECT
TUNING INDICATOR
RIPPLE FILTER
STEREO DECODER
VCO
MPX VOLTAGE REGULATOR
DEMULTIPLIER(1/2) 19kHz
DEMULTIPLIER(1/2) 38kHz
DEMULTIPLIER(1/2) 19kHz
PD1
PD2
MUTING
AUTO BLEND
STEREO/MONAURAL SELECT
ST. INDICATOR
MUTE
DISCRIMINATION
L1 FM RF COIL
L2 FM OSC COIL
D1,D2 SVC203
D4 1SS135
D26,D27 1SS133
D25 1SS133
Q14 KSC945 LOCAL/DX SWITCHING
Q1,Q2 2SC2786L BUFFER
Q12 2SC2787 AM 2ND OSC
Q15 DTC114E AM/FM SELECT
Q16 DTC114E AM/FM SELECT BUFF.
Q17 DTC114E MUTING SWITCHING
Q18 DTC118E ST/M SELECT SWITCHING
D5～12 1SS135
D13,D14 1SS133
Q22 DTC114E SW SWITCHING
D17,D18 1SS133
IC2 LA5004 REGULATOR
Q3 2SK193K SW RF AMP
Q4 2SC2787L SW BUFFER
Q6 2SC2787L BUFFER
Q26 DTC114E MW/LW SWITCH
Q11 2SC2787L AM IST MIX
Q10 2SC2787L OSC BUFFER
Q23 2SA1175 MW/LW B+ SWITCHING
Q19 2SA1175 SW B+ SWITCHING
Q20 KSC945 SW B+ SWITCH DRIVE
D19～22 1SS133
Q9 2SC2786L BUFFER
Q8 2SC2786L BUFFER
Q5 2SK193K MW/LW RF AMP
IC3 μPD4028 BCD TO DICIMAL DECODER
IC4 μPA76HA AGC AMP
D23,D24 1SS133
Q21 DTC114E SW B+ SWITCH DRIVE
D3 KV1260
Q7 2SC2786L AM IST OSC
D15,D16 1SS133
Q24,Q25 DTC114E SW-LW/MW B+ SELECT
MW/LW INPUT
L12 MW/LW FERRITE ROD ANT.
L13 MW/LW RF COIL
L14 AM OSC
X1 10.250MHz
TO DISPLAY BOARD
GND OSC VT CGP TIMER OUT B+2 B+1 BCD D-D CON
TO MAIN BOARD
TO POWER BATTERIES TERMINAL(-)
DRY BATTERIES 1.5×2 "AA" or R6 2PCS.
TO D-D CON BOARD
L-ch R-ch GND B+ OUT S/M CGP TIMER OUT B+ IN 9V
CFS-W501L
AMPLITUDE AND FREQUENCY ARE CHANGING ALWAYS
12～15μS
97μS
MW: 0.5～1.2, LW: 0.4～0.9, SW: 1.3
FM/SW: 3.4, MW/LW: 0

*Description about LW is applicable to CFS-W501L only.

## 2-3. SCHEMATIC DIAGRAM

*— Main Section —*

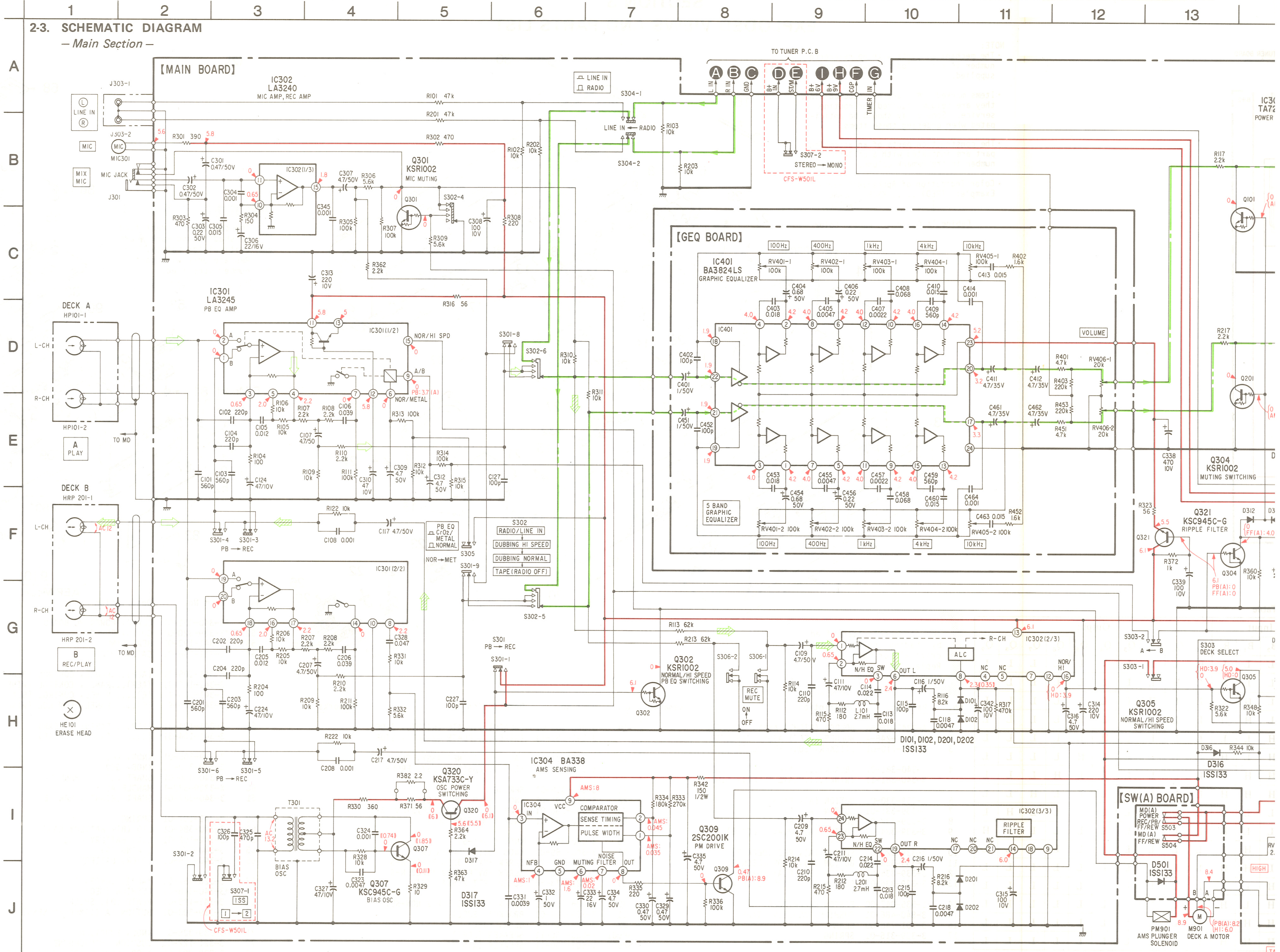

[MAIN BOARD]
IC302 LA3240 MIC AMP, REC AMP
IC302(1/3)
J303-1 LINE IN
J303-2
MIC
MIC301
MIX MIC
MIC JACK
J301
IC301 LA3245 PB EQ AMP
DECK A HP101-1
HP101-2
A PLAY
DECK B HRP 201-1
HRP 201-2
B REC/PLAY
HE101 ERASE HEAD
TO MD
S301-4 S301-3 PB → REC
S301-6 S301-5 PB → REC
S301-2
S307-1 1SS
T301 BIAS OSC
CFS-W50IL

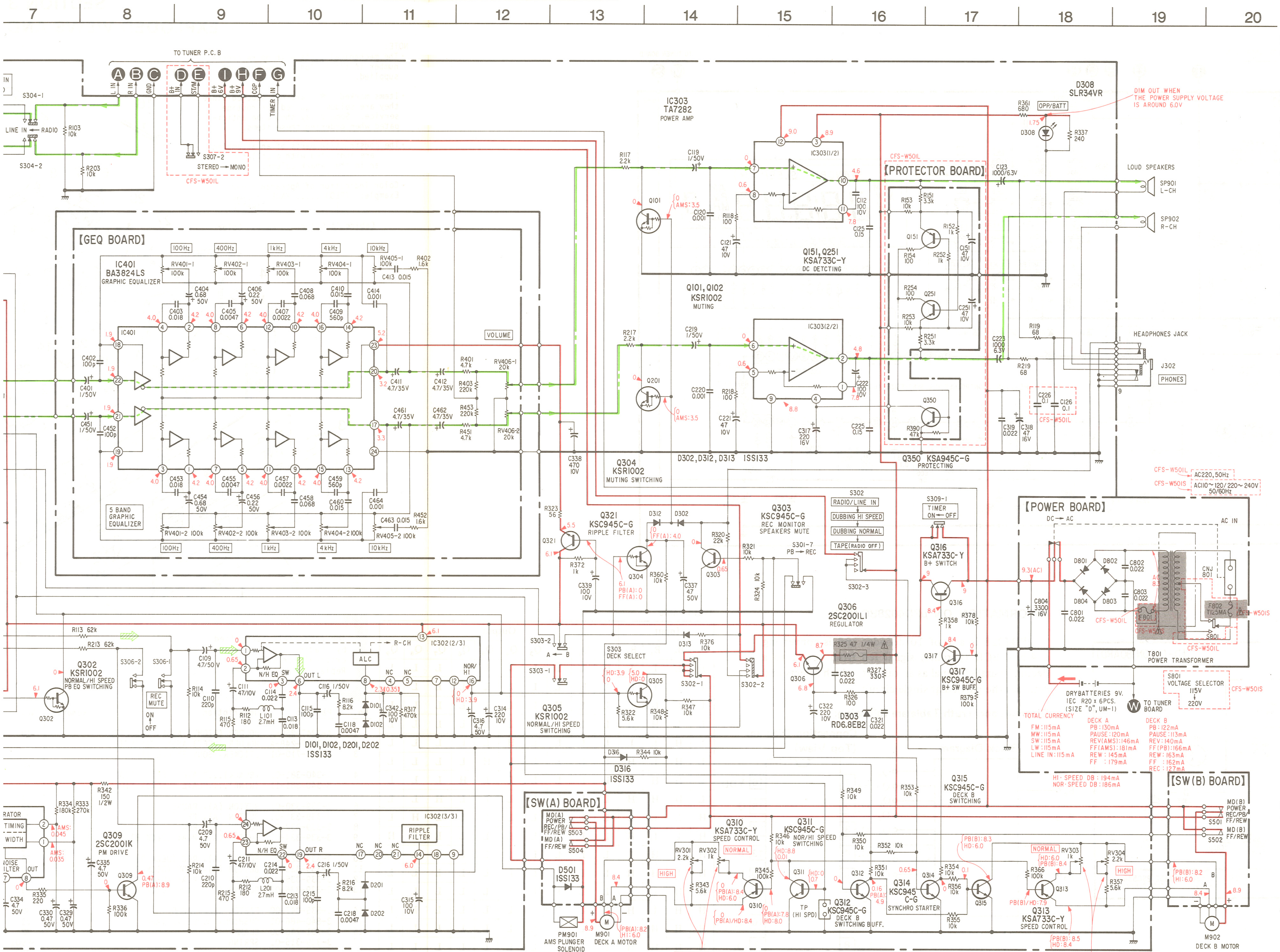

AMPLITUDE AND FREQUENCY ARE CHANGING ALWAYS
VCO
MPX VOLTAGE REGULATOR
DEMULTI-PLIER(1/2) 19kHz
DEMULTI-PLIER(1/2) 38kHz
L OUT
R OUT
L-ch
R-ch
GND
TO MAIN BOARD
B+ OUT
S/M
CGP
TIMER OUT
B+ IN 9V
CFS-W501L
STEREO : 0
MONO : 4.3
IC2 LA5004 REGULATOR
TO POWER BATTERIES TERMINAL(−)
DRY BATTERIES 1.5 x 2 "AA" or R6 2PCS.
TO MAIN BOARD
TO D-D CON BOARD
D19~22 ISS133
Q9 2SC2786L BUFFER
Q8 2SC2786L BUFFER
Q7 2SC2786L AM IST OSC
2SC2787L BUFFER

ion about LW is applicable to CFS-W501L only.

## 2-3. SCHEMATIC DIAGRAM

*— Main Section —*


[MAIN BOARD]
IC302 LA3240 MIC AMP, REC AMP
LINE IN
MIC
MIX MIC
MIC JACK
J303-1
J303-2
J301
Q301 KSR1002 MIC MUTING
LINE IN ↔ RADIO
S304-1
S304-2
TO TUNER P.C.B
S307-2 STEREO ↔ MONO
CFS-W501L
IC301 LA3245 PB EQ AMP
DECK A
HP101-1
HP101-2
A PLAY
DECK B
HRP 201-1
HRP 201-2
B REC/PLAY
HE101 ERASE HEAD
NOR/HI SPD
A/B
NOR/METAL
IC301(1/2)
IC301(2/2)
S302 RADIO/LINE IN
DUBBING HI SPEED
DUBBING NORMAL
TAPE(RADIO OFF)
PB EQ CrO2/METAL NORMAL
NOR ↔ MET
S301-4 S301-3 PB → REC
S301-6 S301-5 PB → REC
S301 PB → REC
[GEQ BOARD]
IC401 BA3824LS GRAPHIC EQUALIZER
100Hz 400Hz 1kHz 4kHz 10kHz
5 BAND GRAPHIC EQUALIZER
VOLUME
Q304 KSR1002 MUTING SWITCHING
Q321 KSC945C-G RIPPLE FILTER
Q302 KSR1002 NORMAL/HI SPEED PB EQ SWITCHING
IC302(2/3)
ALC
REC MUTE
ON OFF
D101, D102, D201, D202 ISS133
S303 DECK SELECT
Q305 KSR1002 NORMAL/HI SPEED SWITCHING
D316 ISS133
IC304 BA338 AMS SENSING
COMPARATOR
SENSE TIMING
PULSE WIDTH
NOISE MUTING FILTER
Q320 KSA733C-Y OSC POWER SWITCHING
T301
BIAS OSC
Q307 KSC945C-G BIAS OSC
D317 ISS133
Q309 2SC2001K PM DRIVE
IC302(3/3)
RIPPLE FILTER
[SW(A) BOARD]
PM901 AMS PLUNGER SOLENOID
M901 DECK A MOTOR
D501 ISS133
IC301 TA7 POWER
Q101
Q201


7
8
9
10
11
12
13
14
15
16
17
18
19
20
TO TUNER P.C.B
S304-1
LINE IN ← RADIO
S304-2
R103 10k
R203 10k
S307-2
STEREO → MONO
CFS-W501L
TIMER IN
IC303
TA7282
POWER AMP
D308
SLR34VR
DIM OUT WHEN THE POWER SUPPLY VOLTAGE IS AROUND 6.0V
OPP/BATT
[PROTECTOR BOARD]
LOUD SPEAKERS
SP901 L-CH
SP902 R-CH
[GEQ BOARD]
IC401
BA3824LS
GRAPHIC EQUALIZER
100Hz
400Hz
1kHz
4kHz
10kHz
VOLUME
5 BAND GRAPHIC EQUALIZER
Q151, Q251
KSA733C-Y
DC DETECTING
Q101, Q102
KSR1002
MUTING
HEADPHONES JACK
J302
PHONES
Q304
KSR1002
MUTING SWITCHING
D302, D312, D313 ISS133
Q350 KSA945C-G
PROTECTING
Q321
KSC945C-G
RIPPLE FILTER
Q303
KSC945C-G
REC MONITOR
SPEAKERS MUTE
S302
RADIO/LINE IN
DUBBING HI SPEED
DUBBING NORMAL
TAPE(RADIO OFF)
S309-1
TIMER
ON → OFF
Q316
KSA733C-Y
B+ SWITCH
[POWER BOARD]
DC ← AC
AC IN
CFS-W501L
AC220, 50Hz
CFS-W501S
AC110~120/220~240V 50/60Hz
Q306
2SC2001L1
REGULATOR
R325 47 1/4W
Q317
KSC945C-G
B+ SW BUFF.
D303
RD6.8EB2
T801
POWER TRANSFORMER
S801
VOLTAGE SELECTOR
115V
220V
DRYBATTERIES 9V.
IEC R20 x 6PCS.
(SIZE "D", UM-1)
TOTAL CURRENT
TO TUNER BOARD
Q302
KSR1002
NORMAL/HI SPEED
PB EQ SWITCHING
IC302(2/3)
ALC
REC MUTE
ON
OFF
S303
DECK SELECT
Q305
KSR1002
NORMAL/HI SPEED
SWITCHING
D101, D102, D201, D202
ISS133
D316
ISS133
Q315
KSC945C-G
DECK B
SWITCHING
Q309
2SC2001K
PM DRIVE
IC302(3/3)
RIPPLE FILTER
[SW(A) BOARD]
D501
ISS133
PM901
AMS PLUNGER SOLENOID
M901
DECK A MOTOR
Q310
KSA733C-Y
SPEED CONTROL
Q311
KSC945C-G
NOR/HI SPEED
SWITCHING
Q312
KSC945C-G
DECK B
SWITCHING BUFF.
Q314
KSC945
C-G
SYNCHRO STARTER
Q313
KSA733C-Y
SPEED CONTROL
[SW(B) BOARD]
M902
DECK B MOTOR
TAPE SPEED ADJUST DECK A
TAPE SPEED ADJUST DECK B
NORMAL
HIGH
FM: 115mA
MW: 115mA
SW: 115mA
LW: 115mA
LINE IN: 115mA
DECK A
PB: 130mA
PAUSE: 120mA
REV(AMS): 146mA
FF(AMS): 181mA
REW: 145mA
FF: 179mA
DECK B
PB: 122mA
PAUSE: 113mA
REV: 140mA
FF(PB): 166mA
REW: 163mA
FF: 162mA
REC: 127mA
HI-SPEED DB: 194mA
NOR-SPEED DB: 186mA

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:

- All capacitors are in $\mu$F unless otherwise noted. pF: $\mu\mu$F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ─▭─ : fusible resistor.
- Switch with sliding contact indicated by hatched lines shows shorting type.
- ━━ : B+ bus.
- ▭ : adjustment for repair.
- Total current is measured with no cassette installed.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
  no mark: FM
  ( ) : AM
  (( )) : REC
- Voltage variations may be noted due to normal production tolerances.
- Power voltage is 9 V and fed with a regulated dc power supply from the battery terminal.
- Waveforms are taken to ground in the no-signal state by using oscilloscope.
- Switches:

| Ref. No. | Switch | Position |
|---|---|---|
| S1 | FM SENS | DX |
| S301 | REC/PB | PB |
| S302 | FUNCTION | RADIO |
| S303 | A/B (DECK SELECT) | B |
| S304 | RADIO/LINE IN | RADIO |
| S305 | PB EQ | NORMAL |
| S306 | REC MUTE | OFF |
| S307 | STEREO/MONO, ISS | STEREO |
| S309 | TIMER | OFF |
| S501 | POWER (DECK B) | OFF |
| S502 | FF/REW (DECK B) | OFF |
| S503 | POWER (DECK A) | OFF |
| S504 | FF/REW (DECK A) | OFF |
| S601 | STAND BY | OFF |
| S602 | TIMER (TIME SET) | OFF |
| S603 | MW (AEP), FM (E) | OFF |
| S604 | FM (AEP) | OFF |
| S605 | SW | OFF |
| S606 | LW (AEP), MW (E) | OFF |
| S607 | + | OFF |
| S608 | – | OFF |
| S609 | CLOCK | OFF |
| S610 | SLEEP | OFF |
| S611 | 5 | OFF |
| S612 | 4 | OFF |
| S613 | MEMORY | OFF |
| S614 | 3 | OFF |
| S615 | 2 | OFF |
| S616 | 1 | OFF |

SIGNAL PATHS

<TUNER SECTION>

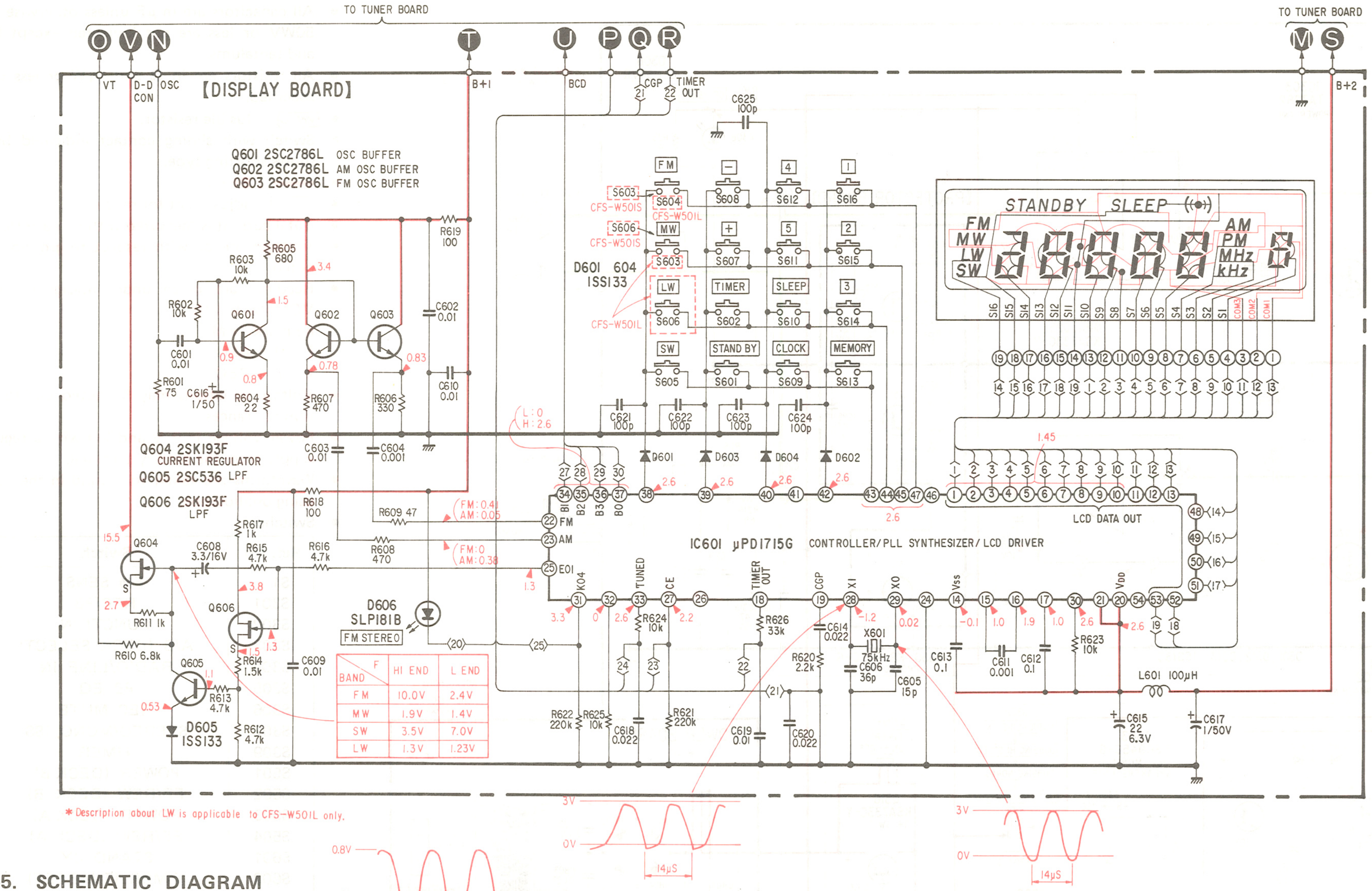
- ━━▶ : FM RF Signal path.
- ━ ━ ▶ : Detected Signal path L-CH.
- ━ - ━ ▶ : Detected Signal path R-CH.
- ⇨ : MW (LW) RF Signal path.
- ⇨ : SW RF Signal path.
- ➡ : AM IF Signal path.

<AUDIO/TC SECTION>

- ━ - ━▶ : FM Signal path L-CH.
- ━ - - ━▶ : FM Signal path R-CH.
- ⇨ : PLAYBACK Signal path (L-CH)
- ⇨ : RECORD Signal path (L-CH)

## 2-4. SCHEMATIC DIAGRAM

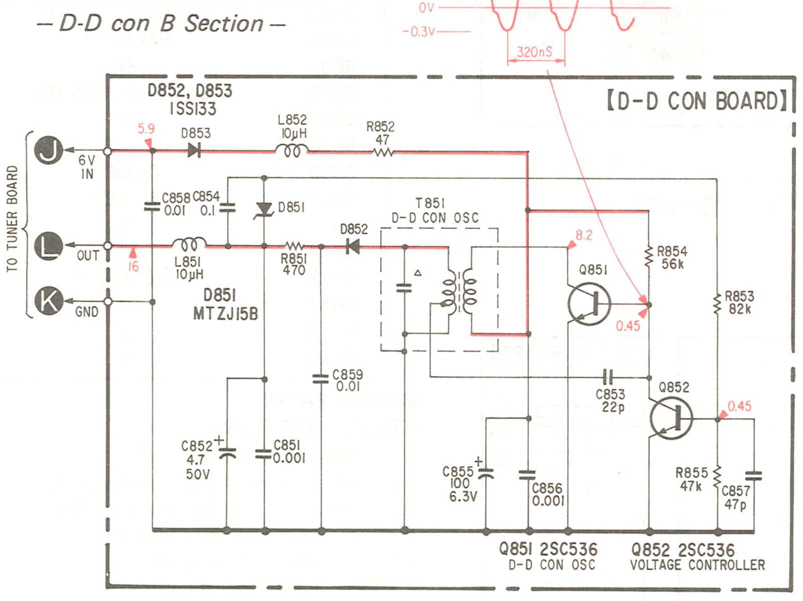
*– Display B Section –*


TO TUNER BOARD
O V N T U P Q R M S
[DISPLAY BOARD]
VT D-D CON OSC B+1 BCD CGP TIMER OUT B+2
Q601 2SC2786L OSC BUFFER
Q602 2SC2786L AM OSC BUFFER
Q603 2SC2786L FM OSC BUFFER
Q604 2SK193F CURRENT REGULATOR
Q605 2SC536 LPF
Q606 2SK193F LPF
D601 604 1SS133
D605 1SS133
D606 SLP181B FM STEREO
IC601 μPD1715G CONTROLLER/PLL SYNTHESIZER/LCD DRIVER
LCD DATA OUT
X601 75kHz
L601 100μH
STANDBY SLEEP FM MW LW SW AM PM MHz kHz
FM MW LW SW STAND BY TIMER SLEEP CLOCK MEMORY
S601 S602 S603 S604 S605 S606 S607 S608 S609 S610 S611 S612 S613 S614 S615 S616
CFS-W501S CFS-W501L
BAND HI END L END
FM 10.0V 2.4V
MW 1.9V 1.4V
SW 3.5V 7.0V
LW 1.3V 1.23V
FM:0.4 AM:0.05
FM:0 AM:0.38
L:0 H:2.6
3V 0V 14μS
0.8V 0V -0.3V 320nS

* Description about LW is applicable to CFS-W501L only.

## 2-5. SCHEMATIC DIAGRAM

*– D-D con B Section –*

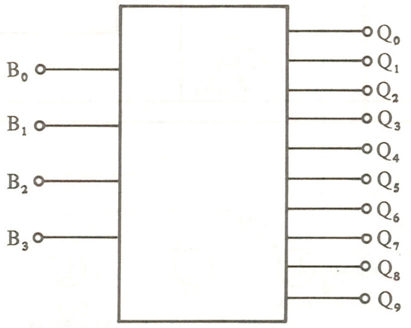

[D-D CON BOARD]
TO TUNER BOARD
J 6V IN
L OUT
K GND
D852, D853 1SS133
D851 MTZJ15B
L852 10μH
L851 10μH
T851 D-D CON OSC
Q851 2SC536 D-D CON OSC
Q852 2SC536 VOLTAGE CONTROLLER
R852 47 R851 470 R854 56k R853 82k R855 47k
C858 0.01 C854 0.1 C859 0.01 C853 22p C852 4.7 50V C851 0.001 C855 100 6.3V C856 0.001 C857 47p
5.9 16 8.2 0.45

## INFORMATION ON μPD4028BC (IC3)

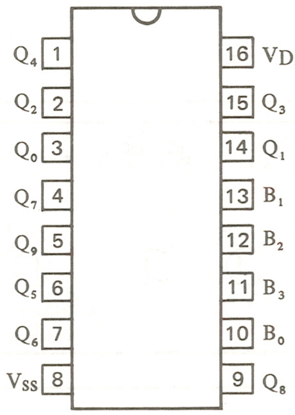
μPD4028 is a 1 of 10 decoder and is converting a 4-bits BCD (parallel) signal fed from IC601 to a decimal parallel signal as an output, which selects and actuates the particular single circuit.

**Diagrams and Truth Table are following:**

### Block Diagram


$B_0$
$B_1$
$B_2$
$B_3$
$Q_0$
$Q_1$
$Q_2$
$Q_3$
$Q_4$
$Q_5$
$Q_6$
$Q_7$
$Q_8$
$Q_9$

### Connection Diagram (Top View)


$Q_4$ 1
$Q_2$ 2
$Q_0$ 3
$Q_7$ 4
$Q_9$ 5
$Q_5$ 6
$Q_6$ 7
$V_{SS}$ 8
16 VDD
15 $Q_3$
14 $Q_1$
13 $B_1$
12 $B_2$
11 $B_3$
10 $B_0$
9 $Q_8$

Truth Table

| Input | | | | Output | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $B_3$ | $B_2$ | $B_1$ | $B_0$ | $Q_0$ | $Q_1$ | $Q_2$ | $Q_3$ | $Q_4$ | $Q_5$ | $Q_6$ | $Q_7$ | $Q_8$ | $Q_9$ |
| L | L | L | L | H | L | L | L | L | L | L | L | L | L |
| L | L | L | H | L | H | L | L | L | L | L | L | L | L |
| L | L | H | L | L | L | H | L | L | L | L | L | L | L |
| L | L | H | H | L | L | L | H | L | L | L | L | L | L |
| L | H | L | L | L | L | L | L | H | L | L | L | L | L |
| L | H | L | H | L | L | L | L | L | H | L | L | L | L |
| L | H | H | L | L | L | L | L | L | L | H | L | L | L |
| L | H | H | H | L | L | L | L | L | L | L | H | L | L |
| H | L | L | L | L | L | L | L | L | L | L | L | H | L |
| H | L | L | H | L | L | L | L | L | L | L | L | L | H |
| H | L | H | L | L | L | L | L | L | L | L | L | L | L |
| H | L | H | H | L | L | L | L | L | L | L | L | L | L |
| H | H | L | L | L | L | L | L | L | L | L | L | L | L |
| H | H | L | H | L | L | L | L | L | L | L | L | L | L |
| H | H | H | L | L | L | L | L | L | L | L | L | L | L |
| H | H | H | H | L | L | L | L | L | L | L | L | L | L |

H: High level
L: Low level

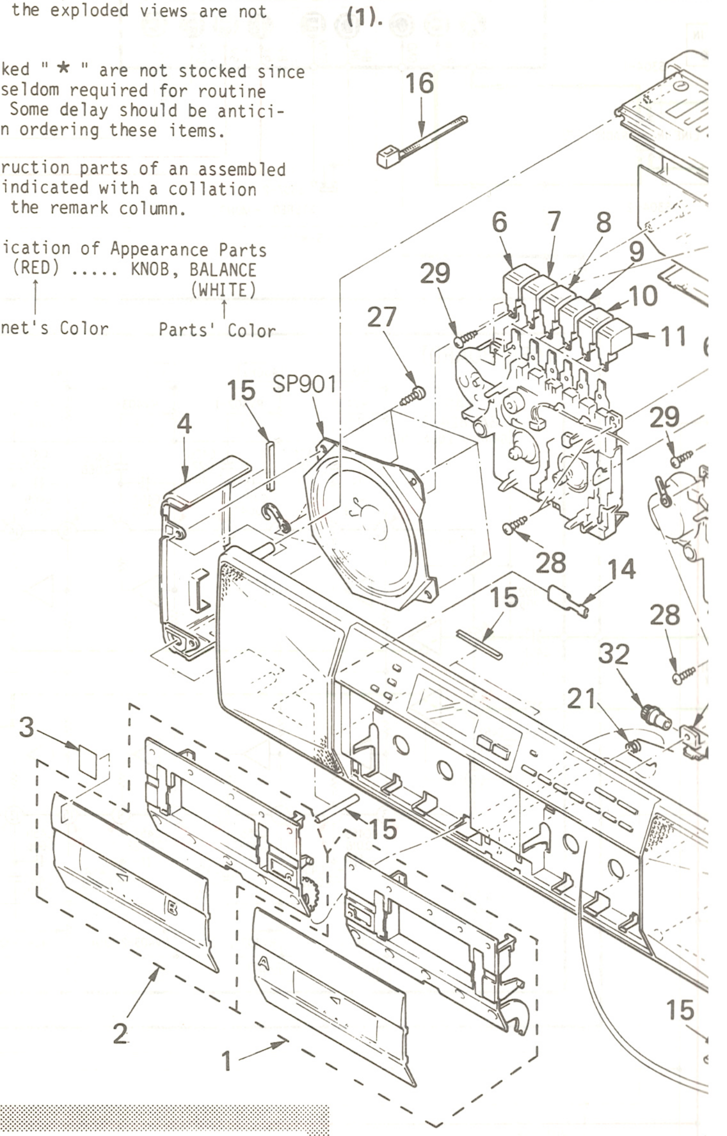
## SECTION 3

## EXPLODED VIEWS AND

IOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color Indication of Appearance Parts
  Example: (RED) ..... KNOB, BALANCE
  (WHITE)
  Cabinet's Color Parts' Color

(1).


16
6
7
8
9
10
11
29
27
29
15
SP901
4
28
14
15
28
32
21
3
15
2
1
15

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 1 | A-3247-250-A | HOLDER (RIGHT) ASSY, CASSETTE | |
| 2 | A-3247-248-A | HOLDER (LEFT) ASSY, CASSETTE | |
| 3 | 3-703-710-01 | STICKER, SONY SYMBOL (12) | |
| 4 | 3-340-381-01 | (BLACK)...PLATE (LEFT), SIDE | |
| | 3-340-381-11 | (WINE)....PLATE (LEFT), SIDE | |
| 6 | 3-339-330-01 | BUTTON (A), PAUSE | |
| 7 | 3-339-331-01 | BUTTON (A), FF | |
| 8 | 3-339-332-01 | BUTTON (A), REW | |
| 9 | 3-339-334-01 | BUTTON (A), PLAY (DECK B) | |
| 10 | 3-339-322-01 | BUTTON (A), REC (DECK B) | |
| 11 | 3-339-333-01 | BUTTON (A), STOP (DECK B) | |
| 12 | 3-339-335-01 | BUTTON (B), PLAY (DECK A) | |
| 13 | 3-339-336-01 | BUTTON (B), STOP (DECK A) | |
| 14 | 1-535-047-00 | FASTEN RECEPTACLE | |
| 15 | 3-840-486-01 | CUSHION, ADHESIVE TAPE | |
| 16 | 3-701-748-00 | CLAMP | |
| 17 | 3-339-315-01 | SPRING | |

| No. |
|---|
| 19 |
| 20 |
| 21 |
| 22 |
| 23 |
| 24 |
| 25 |
| 26 |
| 27 |
| 28 |
| 29 |
| 30 |
| 31 |
| 32 |
| SP901 |
| SP902 |

# SECTION 3
# EXPLODED VIEWS AND PARTS LIST

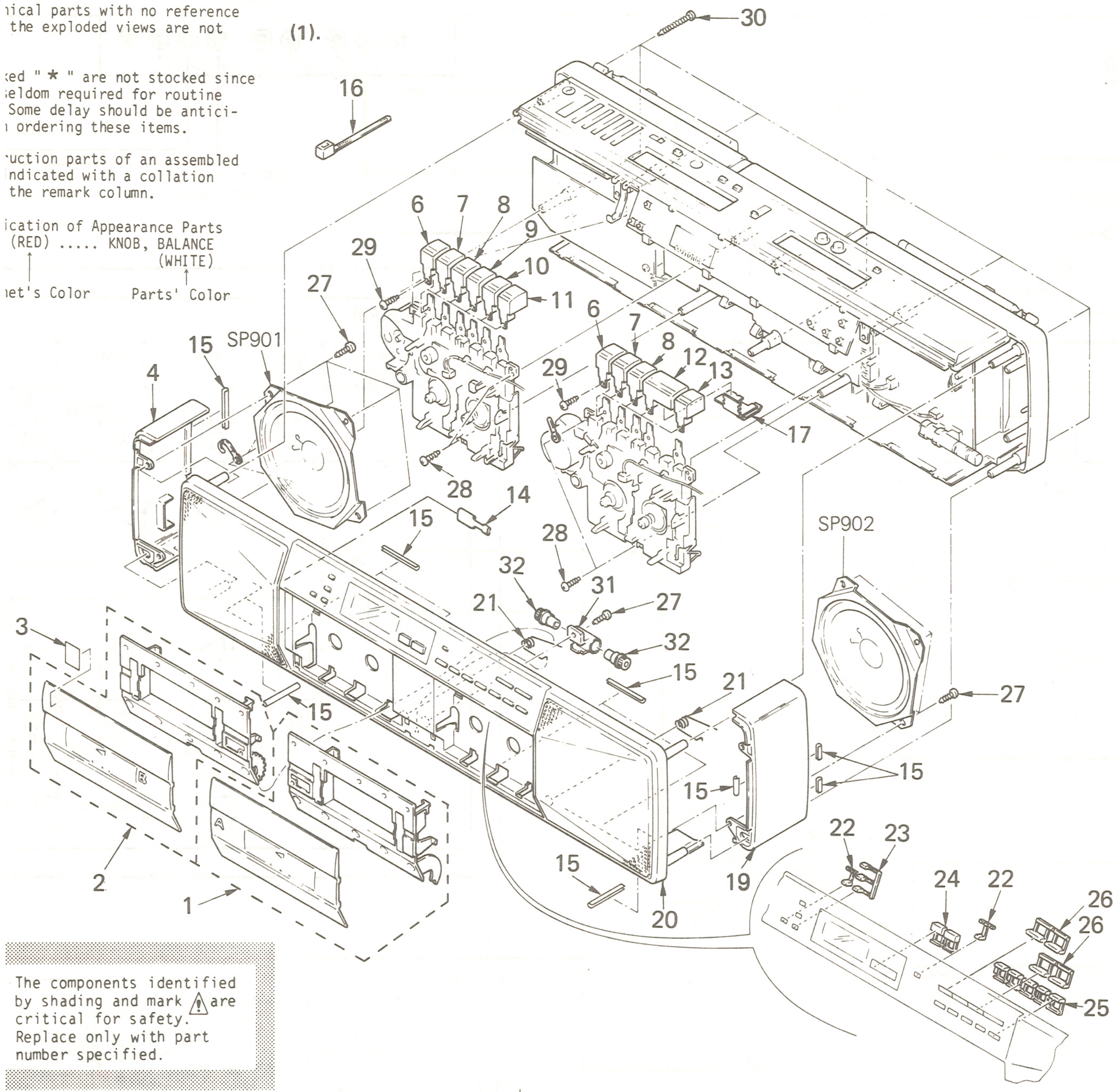
ical parts with no reference
the exploded views are not

ked " * " are not stocked since
seldom required for routine
Some delay should be antici-
ordering these items.

uction parts of an assembled
ndicated with a collation
the remark column.

ication of Appearance Parts
(RED) ..... KNOB, BALANCE
(WHITE)
↑ ↑
net's Color Parts' Color

(1).

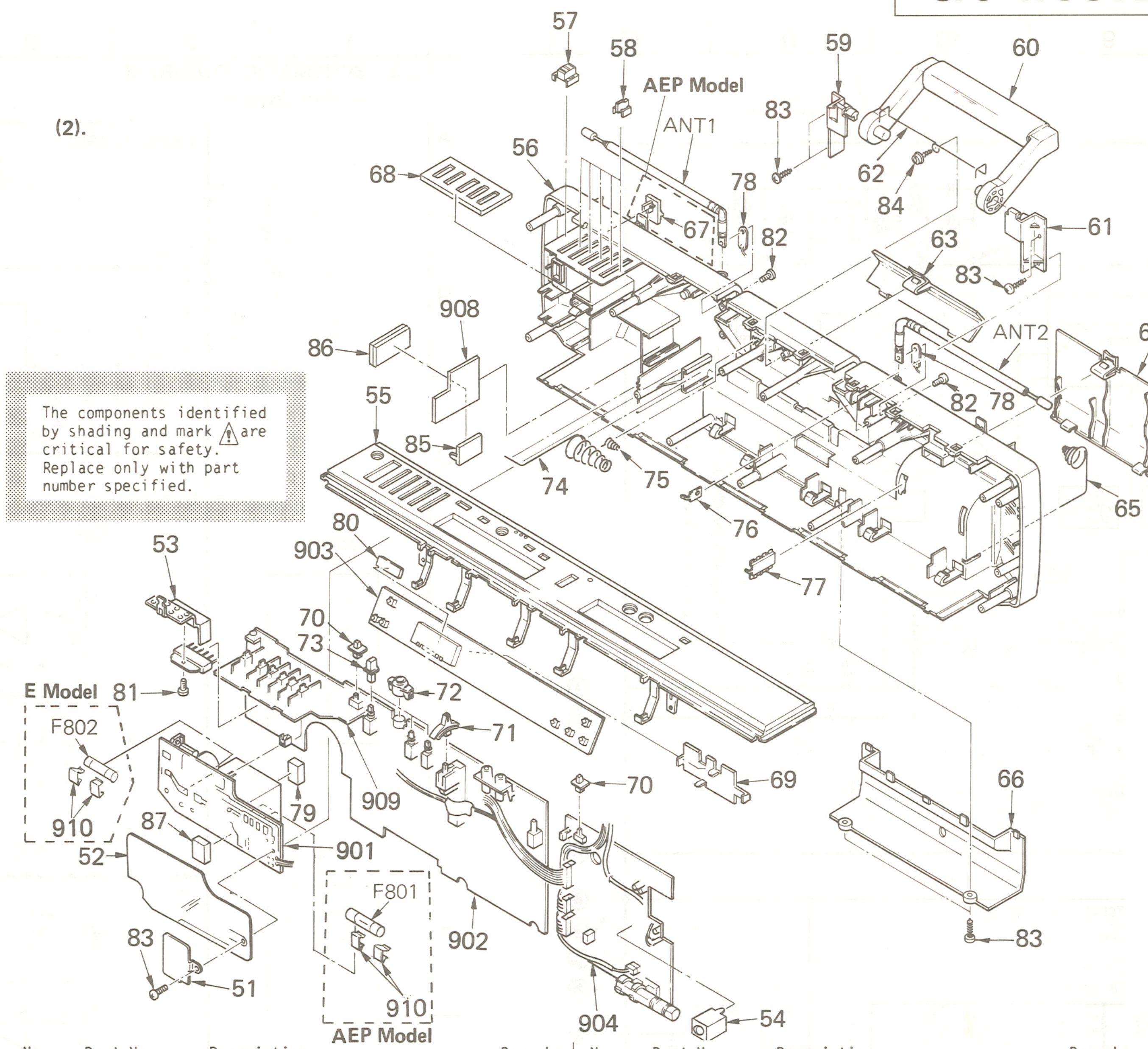


The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

| Part No. | Description | Remarks |
|---|---|---|
| A-3247-250-A | HOLDER (RIGHT) ASSY, CASSETTE | |
| A-3247-248-A | HOLDER (LEFT) ASSY, CASSETTE | |
| 3-703-710-01 | STICKER, SONY SYMBOL (12) | |
| 3-340-381-01 | (BLACK)...PLATE (LEFT), SIDE | |
| 3-340-381-11 | (WINE)....PLATE (LEFT), SIDE | |
| 3-339-330-01 | BUTTON (A), PAUSE | |
| 3-339-331-01 | BUTTON (A), FF | |
| 3-339-332-01 | BUTTON (A), REW | |
| 3-339-334-01 | BUTTON (A), PLAY (DECK B) | |
| 3-339-322-01 | BUTTON (A), REC (DECK B) | |
| 3-339-333-01 | BUTTON (A), STOP (DECK B) | |
| 3-339-335-01 | BUTTON (B), PLAY (DECK A) | |
| 3-339-336-01 | BUTTON (B), STOP (DECK A) | |
| 1-535-047-00 | FASTEN RECEPTACLE | |
| 3-840-486-01 | CUSHION, ADHESIVE TAPE | |
| 3-701-748-00 | CLAMP | |
| 3-339-315-01 | SPRING | |

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 19 | 3-340-382-01 | (BLACK)...PLATE (RIGHT), SIDE | |
| | 3-340-382-11 | (WINE)....PLATE (RIGHT), SIDE | |
| 20 | X-3339-327-1 | (AEP)...CABINET ASSY, FRONT | |
| | X-3339-330-1 | (E).....CABINET ASSY, FRONT | |
| 21 | 3-339-318-01 | SPRING | |
| 22 | 3-340-391-01 | KNOB (M)(MEMORY,CLOCK) | |
| 23 | 3-340-388-01 | KNOB (T)(TIMER/SLEEP/STAND BY) | |
| 24 | 3-340-392-01 | KNOB (PM)(TIME SET) | |
| 25 | 3-340-390-01 | KNOB (P)(1-5) | |
| 26 | 3-340-389-01 | KNOB (B)(FM/MW,SW/LW) | |
| 27 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S | |
| 28 | 7-685-648-79 | SCREW +BVTP 3X12 TYPE2 N-S | |
| 29 | 7-621-773-86 | SCREW +PTT 2.6X4 (S) | |
| 30 | 7-685-155-11 | SCREW +P 3X40 TYPE2 NON-SLIT | |
| 31 | 3-339-314-01 | BRACKET, EJECT | |
| 32 | 3-326-411-01 | GEAR, EJECT | |
| SP901 | 1-503-750-11 | SPEAKER (LEFT) | |
| SP902 | 1-503-750-11 | SPEAKER (RIGHT) | |

(2).



The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 51 | *3-340-331-01 | CLAMP, POWER PC BOARD | |
| 52 | *3-339-320-01 | COVER, POWER | |
| 53 | *3-341-193-01 | HEAT SINK | |
| 54 | 3-341-196-01 | CASE, SHIELD | |
| 55 | 3-341-105-21 | (AEP)...PANEL, CONTROL (BLACK) | |
| | 3-341-105-31 | (AEP)...PANEL, CONTROL (WINE) | |
| | 3-341-105-41 | (E).....PANEL, CONTROL (BLACK) | |
| | 3-341-105-91 | (E).....PANEL, CONTROL (WINE) | |
| 56 | 3-341-104-21 | (AEP)...CABINET (REAR) | |
| | 3-341-104-31 | (E).....CABINET (REAR) | |
| 57 | 3-339-305-01 | KNOB, VOL | |
| 58 | 3-339-302-01 | KNOB, GEQ | |
| 59 | 3-340-386-01 | SHAFT (LEFT), HANDLE | |
| 60 | X-3339-322-1 | HANDLE ASSY | |
| 61 | 3-340-387-01 | SHAFT (RIGHT), HANDLE | |
| 62 | 3-341-101-01 | SPRING | |
| 63 | 3-340-384-01 | LID (B), BATTERY CASE | |
| 64 | 3-341-102-01 | LID, BATTERY CASE | |
| 65 | 3-340-396-01 | SPRING (A) | |
| 66 | 3-340-385-01 | COVER, BATTERY | |
| 67 | 3-326-452-01 | (AEP)...KNOB, ISS | |
| 68 | *3-340-348-01 | CUSHION (GEQ) | |
| 69 | 3-341-199-01 | PLATE (D), SHIELD | |
| 70 | 3-339-303-01 | BUTTON (A)(TIMER,FM SENS) | |
| 71 | 3-339-328-01 | KNOB, FUNCTION | |
| 72 | 3-321-122-01 | CUSHION, MICROPHONE | |
| 73 | 3-339-307-01 | KNOB, SQUARE (REC MUTE,PB EQ,LINE IN) | |
| 74 | 3-340-397-01 | SPRING (B) | |
| 75 | 3-340-398-01 | SPRING (C) | |

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 76 | 3-340-395-01 | TERMINAL BOARD (B), BATTERY (CLOCK) | |
| 77 | 3-340-394-01 | TERMINAL BOARD (A), BATTERY (POWER) | |
| 78 | *3-341-103-01 | TERMINAL, ANTENNA | |
| 79 | 3-341-191-01 | CUSHION (TRANSFORMER) | |
| 80 | *3-341-158-01 | SPACER | |
| 81 | 7-685-870-01 | SCREW +BVTT 3X5 (S) | |
| 82 | 7-682-548-09 | SCREW +B 3X8 | |
| 83 | 7-685-648-79 | SCREW +BVTP 3X12 TYPE2 N-S | |
| 84 | 3-703-137-00 | SCREW, TAPPING | |
| 85 | 3-341-198-01 | PLATE (F), SHIELD | |
| 86 | 3-341-197-01 | PLATE (E), SHIELD | |
| 87 | 4-911-047-01 | VIBRATION CONTROL (D) | |
| 901 | *1-623-359-11 | PC BOARD, POWER | |
| 902 | *A-3270-428-A | (AEP)...PC BOARD ASSY, MAIN | |
| | *A-3270-431-A | (E).....PC BOARD ASSY, MAIN | |
| 903 | *A-3219-129-A | (AEP)...PC BOARD ASSY, DISPLAY | |
| | *A-3219-131-A | (E).....PC BOARD ASSY, DISPLAY | |
| 904 | *A-3266-416-A | (AEP)...PC BOARD ASSY, TUNER | |
| | *A-3266-421-A | (E).....PC BOARD ASSY, TUNER | |
| 908 | *1-623-357-11 | PC BOARD, D.D CON | |
| 909 | *1-623-358-11 | PC BOARD, G.EQ | |
| 910 | 1-533-183-11 | HOLDER, FUSE | |
| 910 | 1-533-183-11 | (AEP)...PC BOARD, PROTECTOR | |
| ANT1 | 1-501-222-41 | ANTENNA, TELESCOPIC (FM/SW) | |
| ANT2 | 1-501-222-41 | ANTENNA, TELESCOPIC (FM/SW) | |
| F801 ⚠ | .1-532-967-11 | (AEP)...FUSE (T 1.25A) | |
| F802 ⚠ | .1-532-611-11 | (E).....FUSE (T 0.125A) | |

(3). DECK A
(MF-W501PB-7

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| No. | Part No. |
|---|---|
| 101 | 3-313-380- |
| 102 | A-3102-092 |
| 103 | 3-313-902- |
| 104 | 3-701-437- |
| 105 | 3-313-305- |
| 106 | 3-313-344- |
| 107 | 3-313-333- |
| 108 | 3-558-708- |
| 109 | 3-313-345- |
| 110 | A-3130-031 |
| 111 | X-3313-311 |
| 112 | 3-334-717- |
| 113 | 3-313-340- |
| 114 | 3-331-108- |
| | 3-331-108- |
| | 3-331-108- |
| | 3-331-108- |
| | 3-331-108- |
| 115 | 3-578-138- |
| | 3-578-138- |
| | 3-578-138- |
| 116 | 3-313-316- |
| 117 | 3-307-948- |
| 118 | 3-703-597- |
| 119 | 3-307-948- |
| 120 | 3-701-438- |
| | 3-701-438- |

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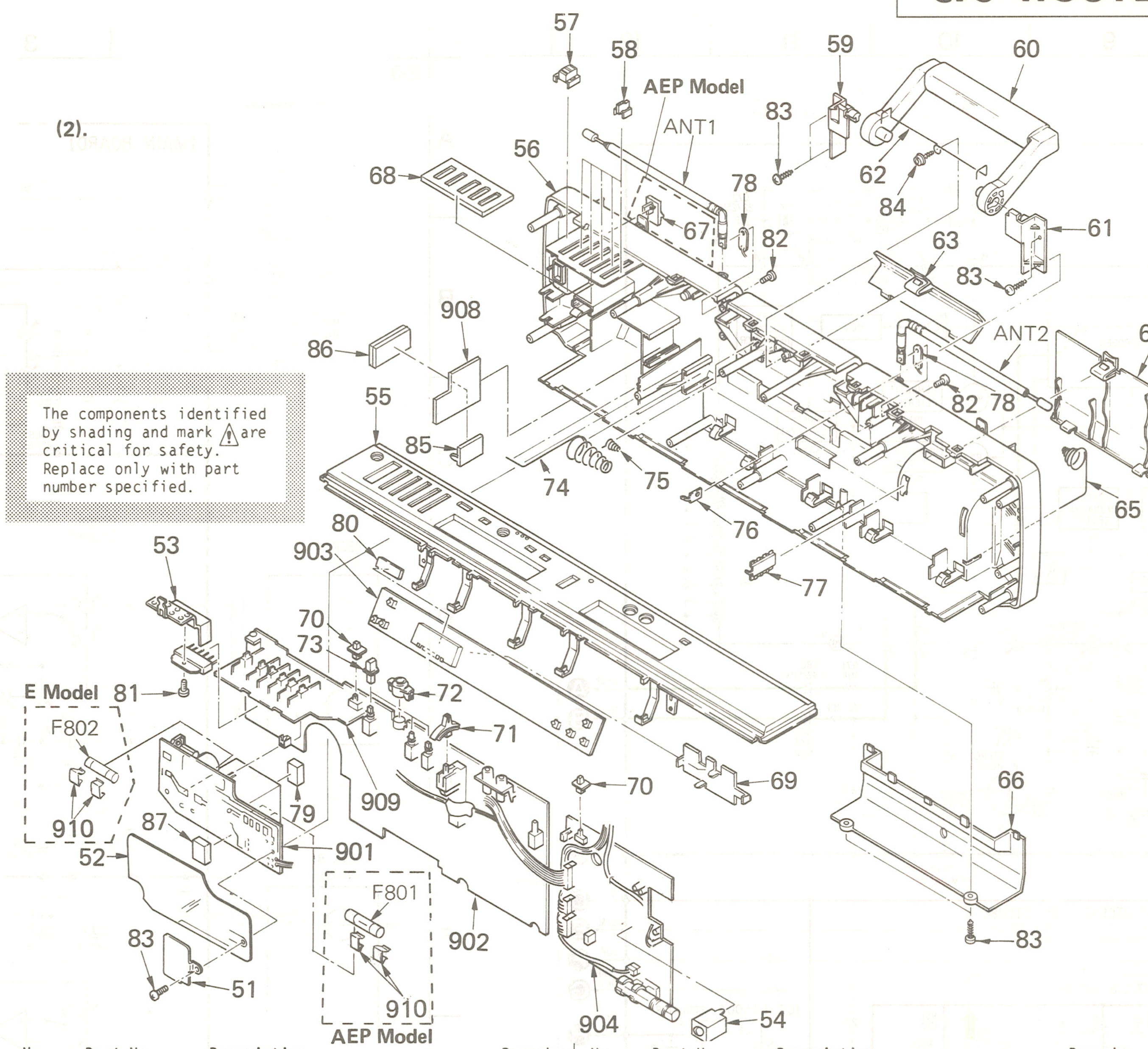
Remarks

## (2).

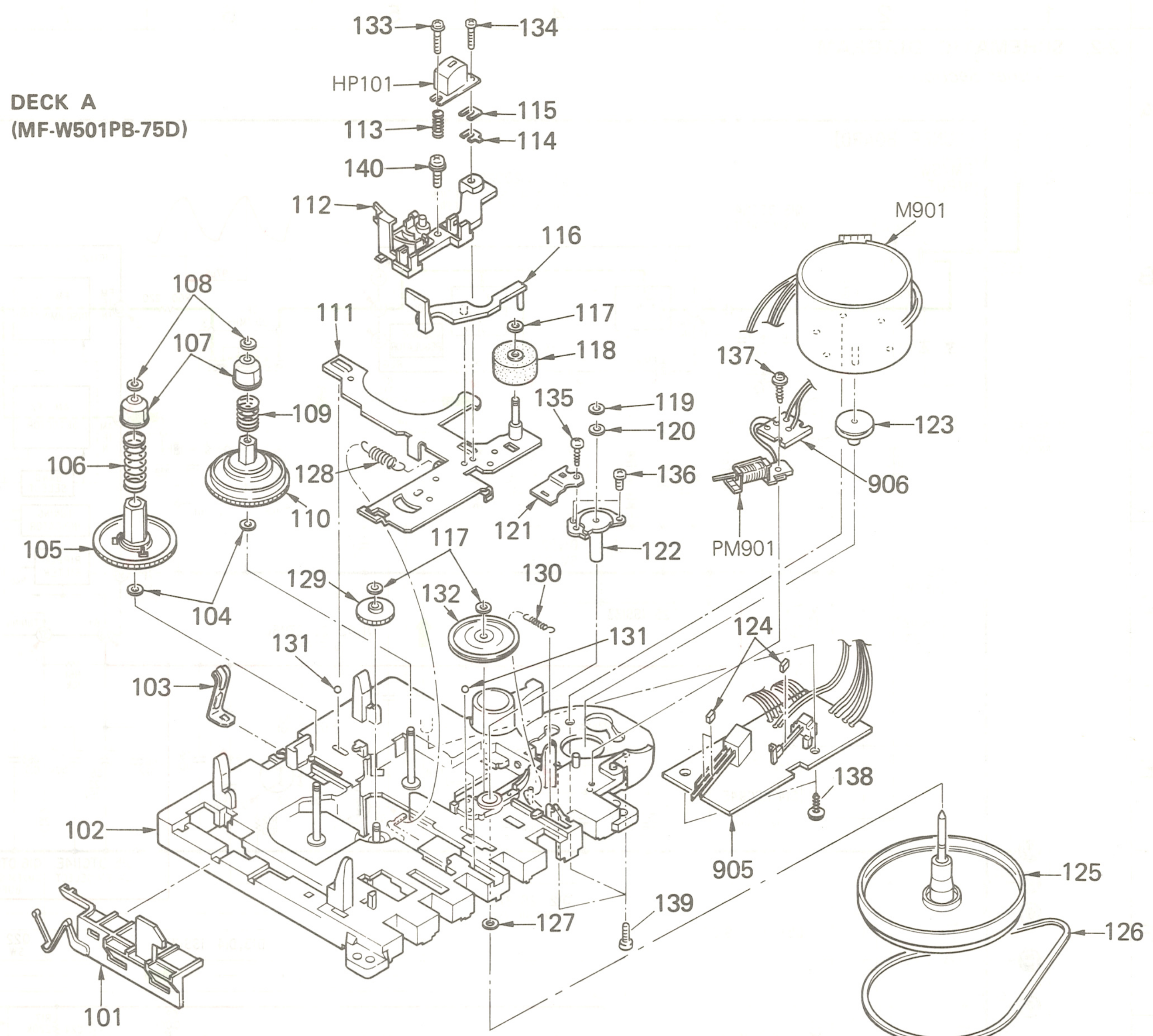
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.



| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 51 | *3-340-331-01 | CLAMP, POWER PC BOARD | |
| 52 | *3-339-320-01 | COVER, POWER | |
| 53 | *3-341-193-01 | HEAT SINK | |
| 54 | 3-341-196-01 | CASE, SHIELD | |
| 55 | 3-341-105-21 | (AEP)...PANEL, CONTROL (BLACK) | |
| | 3-341-105-31 | (AEP)...PANEL, CONTROL (WINE) | |
| | 3-341-105-41 | (E).....PANEL, CONTROL (BLACK) | |
| | 3-341-105-91 | (E).....PANEL, CONTROL (WINE) | |
| 56 | 3-341-104-21 | (AEP)...CABINET (REAR) | |
| | 3-341-104-31 | (E).....CABINET (REAR) | |
| 57 | 3-339-305-01 | KNOB, VOL | |
| 58 | 3-339-302-01 | KNOB, GEQ | |
| 59 | 3-340-386-01 | SHAFT (LEFT), HANDLE | |
| 60 | X-3339-322-1 | HANDLE ASSY | |
| 61 | 3-340-387-01 | SHAFT (RIGHT), HANDLE | |
| 62 | 3-341-101-01 | SPRING | |
| 63 | 3-340-384-01 | LID (B), BATTERY CASE | |
| 64 | 3-341-102-01 | LID, BATTERY CASE | |
| 65 | 3-340-396-01 | SPRING (A) | |
| 66 | 3-340-385-01 | COVER, BATTERY | |
| 67 | 3-326-452-01 | (AEP)...KNOB, ISS | |
| 68 | *3-340-348-01 | CUSHION (GEQ) | |
| 69 | 3-341-199-01 | PLATE (D), SHIELD | |
| 70 | 3-339-303-01 | BUTTON (A)(TIMER,FM SENS) | |
| 71 | 3-339-328-01 | KNOB, FUNCTION | |
| 72 | 3-321-122-01 | CUSHION, MICROPHONE | |
| 73 | 3-339-307-01 | KNOB, SQUARE (REC MUTE,PB EQ,LINE IN) | |
| 74 | 3-340-397-01 | SPRING (B) | |
| 75 | 3-340-398-01 | SPRING (C) | |

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 76 | 3-340-395-01 | TERMINAL BOARD (B), BATTERY (CLOCK) | |
| 77 | 3-340-394-01 | TERMINAL BOARD (A), BATTERY (POWER) | |
| 78 | *3-341-103-01 | TERMINAL, ANTENNA | |
| 79 | 3-341-191-01 | CUSHION (TRANSFORMER) | |
| 80 | *3-341-158-01 | SPACER | |
| 81 | 7-685-870-01 | SCREW +BVTT 3X5 (S) | |
| 82 | 7-682-548-09 | SCREW +B 3X8 | |
| 83 | 7-685-648-79 | SCREW +BVTP 3X12 TYPE2 N-S | |
| 84 | 3-703-137-00 | SCREW, TAPPING | |
| 85 | 3-341-198-01 | PLATE (F), SHIELD | |
| 86 | 3-341-197-01 | PLATE (E), SHIELD | |
| 87 | 4-911-047-01 | VIBRATION CONTROL (D) | |
| 901 | *1-623-359-11 | PC BOARD, POWER | |
| 902 | *A-3270-428-A | (AEP)...PC BOARD ASSY, MAIN | |
| | *A-3270-431-A | (E).....PC BOARD ASSY, MAIN | |
| 903 | *A-3219-129-A | (AEP)...PC BOARD ASSY, DISPLAY | |
| | *A-3219-131-A | (E).....PC BOARD ASSY, DISPLAY | |
| 904 | *A-3266-416-A | (AEP)...PC BOARD ASSY, TUNER | |
| | *A-3266-421-A | (E).....PC BOARD ASSY, TUNER | |
| 908 | *1-623-357-11 | PC BOARD, D.D CON | |
| 909 | *1-623-358-11 | PC BOARD, G.EQ | |
| 910 | 1-533-183-11 | HOLDER, FUSE | |
| 910 | 1-533-183-11 | (AEP)...PC BOARD, PROTECTOR | |
| ANT1 | 1-501-222-41 | ANTENNA, TELESCOPIC (FM/SW) | |
| ANT2 | 1-501-222-41 | ANTENNA, TELESCOPIC (FM/SW) | |
| F801 | ⚠.1-532-967-11 | (AEP)...FUSE (T 1.25A) | |
| F802 | ⚠.1-532-611-11 | (E).....FUSE (T 0.125A) | |

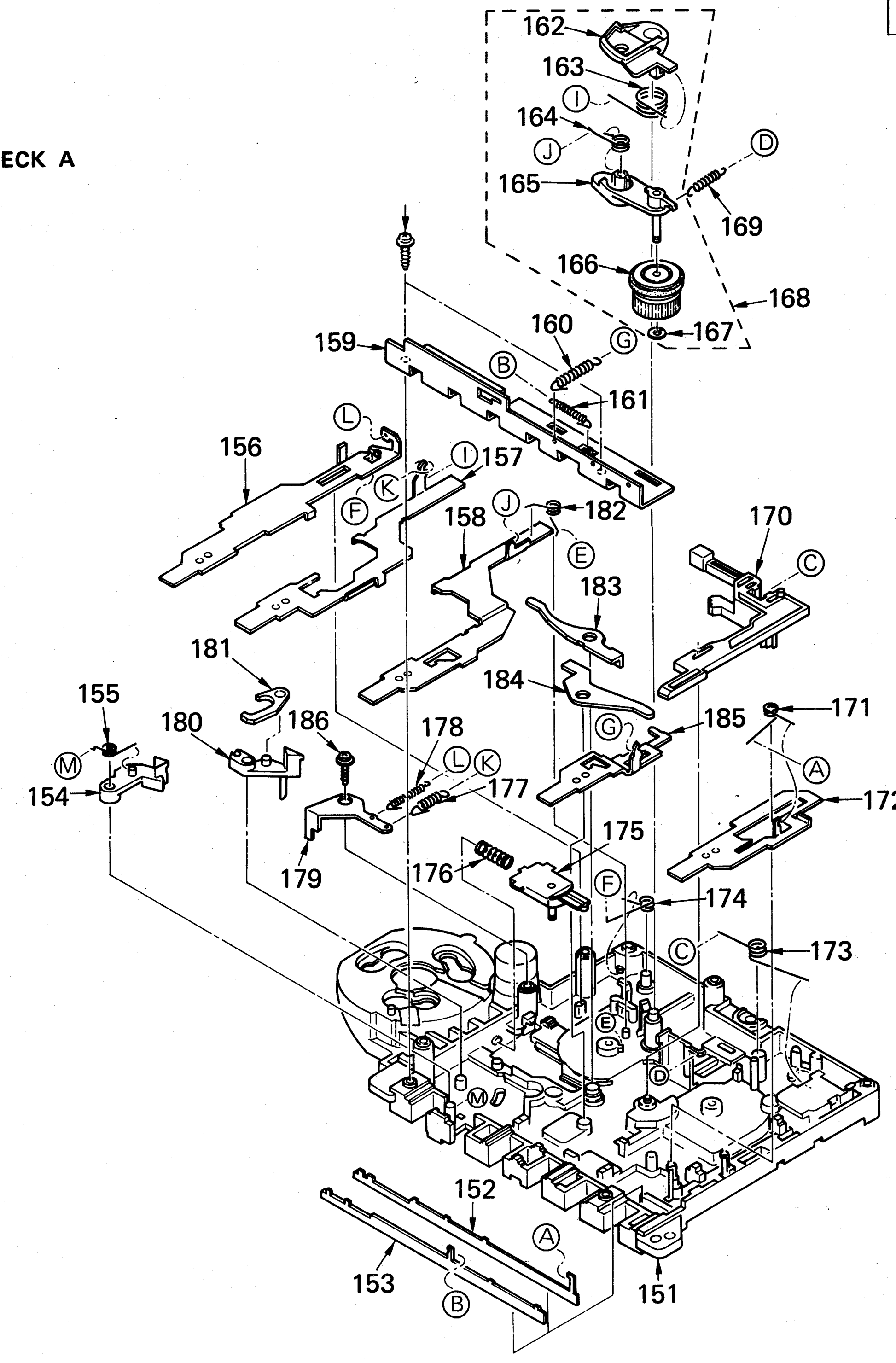
## (3). DECK A
(MF-W501PB-75D)



| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 101 | 3-313-380-01 | CLAW (A), EJECT | |
| 102 | A-3102-092-A | CHASSIS ASSY, MECHANICAL | |
| 103 | 3-313-902-11 | SPRING, CASSETTE | |
| 104 | 3-701-437-21 | WASHER | |
| 105 | 3-313-305-00 | TABLE, REEL, SUPPLY | |
| 106 | 3-313-344-00 | SPRING, COMPRESSION | |
| 107 | 3-313-333-00 | CLAW, REEL | |
| 108 | 3-558-708-01 | WASHER, STOPPER | |
| 109 | 3-313-345-00 | SPRING, COMPRESSION | |
| 110 | A-3130-031-B | TABLE ASSY, REEL, TAKE-UP | |
| 111 | X-3313-311-1 | CHASSIS ASSY, HEAD | |
| 112 | 3-334-717-01 | BRACKET (M), HEAD | |
| 113 | 3-313-340-00 | SPRING, COMPRESSION | |
| 114 | 3-331-108-01 | LUG (T), SHIM (t=0.1) | |
| | 3-331-108-11 | LUG (T), SHIM (t=0.2) | |
| | 3-331-108-21 | LUG (T), SHIM (t=0.3) | |
| | 3-331-108-31 | LUG (T), SHIM (t=0.4) | |
| | 3-331-108-41 | LUG (T), SHIM (t=0.5) | |
| 115 | 3-578-138-01 | SHIM (t=0.1) | |
| | 3-578-138-11 | SHIM (t=0.2) | |
| | 3-578-138-21 | SHIM (t=0.3) | |
| 116 | 3-313-316-00 | PU | |
| 117 | 3-307-948-01 | WASHER, NYLON | |
| 118 | 3-703-597-41 | PINCH ROLLER, STANDARD | |
| 119 | 3-307-948-41 | WASHER, NYLON (t=0.3) | |
| 120 | 3-701-438-01 | WASHER (t=0.13) | |
| | 3-701-438-11 | WASHER (t=0.25) | |

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 121 | *3-332-309-01 | SPRING (B) | |
| 122 | X-3319-945-1 | BEARING ASSY, CAPSTAN | |
| 123 | X-3330-617-1 | PULLEY ASSY, MOTOR | |
| 124 | 9-911-844-XX | SPACER, LEAF | |
| 125 | X-3319-944-1 | FLYWHEEL (F) ASSY | |
| 126 | 3-313-389-01 | BELT | |
| 127 | 3-701-438-11 | WASHER, 2.5 | |
| 128 | 3-341-181-01 | SPRING, TENSION | |
| 129 | 3-558-620-11 | GEAR, REWIND | |
| 130 | 3-313-384-01 | SPRING, TENSION | |
| 131 | 7-671-112-11 | BALL, STEEL (2.5MM DIA.) | |
| 132 | X-3313-307-0 | PULLEY ASSY, FWD | |
| 133 | 3-701-465-00 | SCREW, LOCK | |
| 134 | 7-621-772-40 | SCREW +B 2X8 | |
| 135 | 3-324-220-01 | SCREW (B2.6), TAPPING | |
| 136 | 3-318-203-71 | SCREW (B1.7X5), TAPPING | |
| 137 | 7-685-105-19 | SCREW (2X8), + PTPWH | |
| 138 | 7-687-233-11 | SCREW (+ PTPWH) (2.6X6) | |
| 139 | 7-621-259-35 | SCREW +P 2.6X5 | |
| 140 | 7-621-255-35 | SCREW (2MMX5), + PWH | |
| 905 | *1-621-580-11 | PC BOARD, SW (A) | |
| 906 | *1-602-735-00 | PC BOARD, PLUNGER SOLENOID | |
| HP101 | 1-543-283-11 | HEAD, MAGNETIC (PB) | |
| M901 | 1-541-330-11 | MOTOR (CW) | |
| PM901 | 1-454-355-00 | SOLENOID, PLUNGER | |

## (4). DECK A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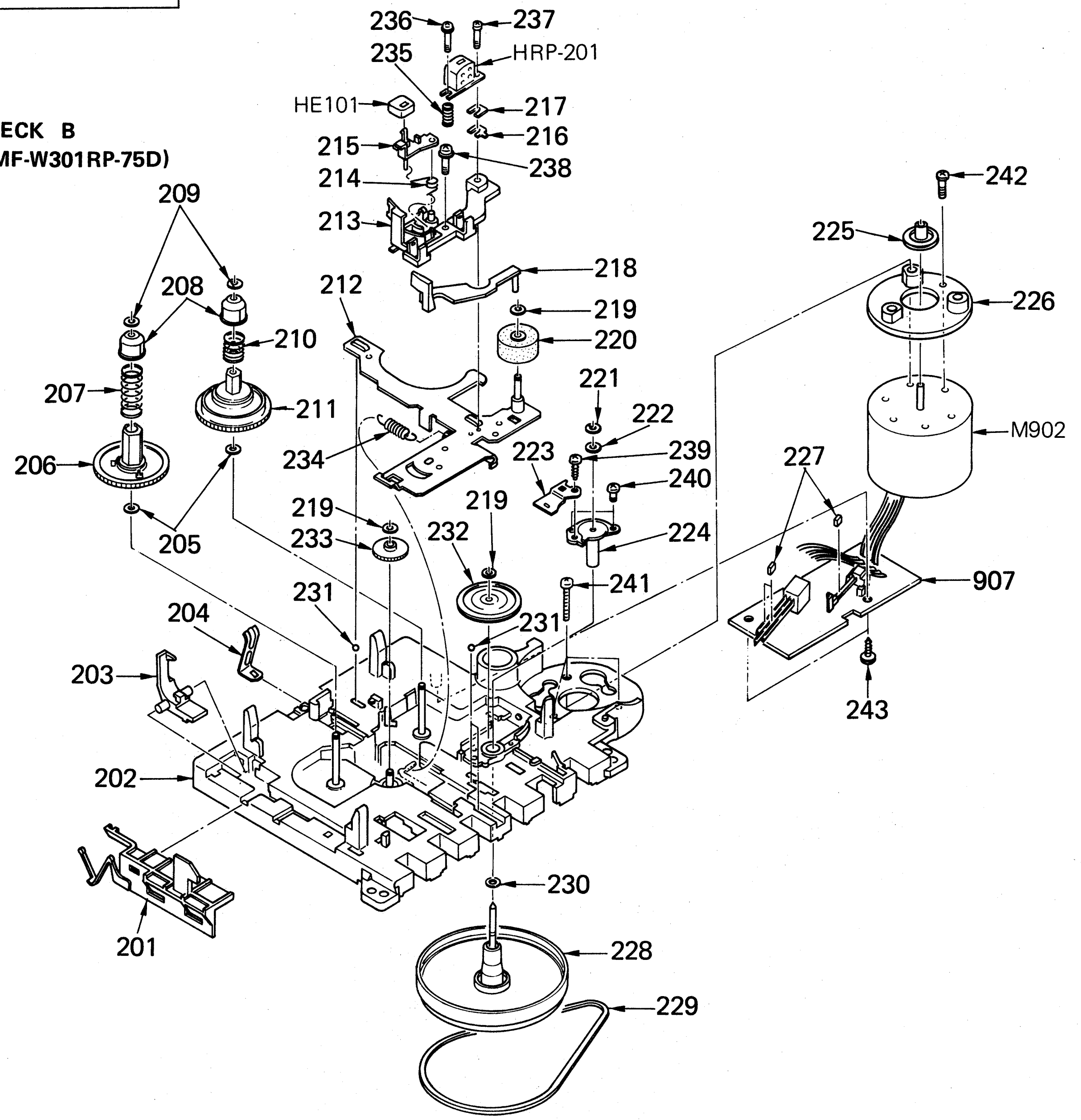
| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 151 | A-3102-092-A | CHASSIS ASSY, MECHANICAL | |
| 152 | *3-313-351-00 | PLATE (A), LOCK | |
| 153 | *3-313-352-00 | PLATE (B), LOCK | |
| 154 | 3-313-322-02 | LEVER (A), S.OFF | |
| 155 | 3-313-323-00 | SPRING | |
| 156 | *3-313-381-01 | LEVER (B), PAUSE BUTTON | |
| 157 | *3-313-353-00 | LEVER, FF BUTTON | |
| 158 | *3-313-354-00 | LEVER, REW BUTTON | |
| 159 | *3-313-359-00 | RETAINER, LEVER | |
| 160 | 3-313-369-00 | SPRING, TENSION | |
| 161 | 3-313-343-00 | SPRING, TENSION | |
| 162 | 3-313-314-00 | LEVER (SI), FR | |
| 163 | 3-313-315-00 | SPRING | |
| 164 | 3-313-313-00 | SPRING | |
| 165 | X-3313-304-0 | ARM ASSY, REW | |
| 166 | X-3313-310-1 | IDLER ASSY, FR | |
| 167 | 3-558-708-01 | WASHER, STOPPER | |
| 168 | A-3136-040-B | IDLER COMPLETE ASSY, FR | |

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 169 | 3-313-365-00 | SPRING, TENSION | |
| 170 | 3-313-356-00 | BRAKE | |
| 171 | 3-313-331-00 | SPRING | |
| 172 | *3-313-325-00 | LEVER, STOP BUTTON | |
| 173 | 3-313-327-00 | SPRING | |
| 174 | 3-313-378-01 | SPRING (A) | |
| 175 | X-3313-301-0 | BRACKET ASSY, T PULLEY | |
| 176 | 3-573-464-00 | SPRING, COMPRESSION | |
| 177 | 3-313-348-00 | SPRING, TENSION | |
| 178 | 3-313-349-00 | SPRING, TENSION | |
| 179 | *3-332-310-01 | HOOK, SPRING | |
| 180 | X-3313-306-0 | LEVER (B) ASSY, SHUT-OFF | |
| 181 | *3-313-337-00 | CHIP, JOINT, S.OFF | |
| 182 | 3-313-338-00 | SPRING | |
| 183 | *3-313-320-11 | LEVER, RCP | |
| 184 | *3-313-321-00 | LEVER, PREVENTION, RFR | |
| 185 | *3-313-326-00 | LEVER, FWD BUTTON | |
| 186 | 7-687-233-11 | SCREW (+ PTPWH) (2.6X6) | |

## (5). DECK B
### (MF-W301RP-75D)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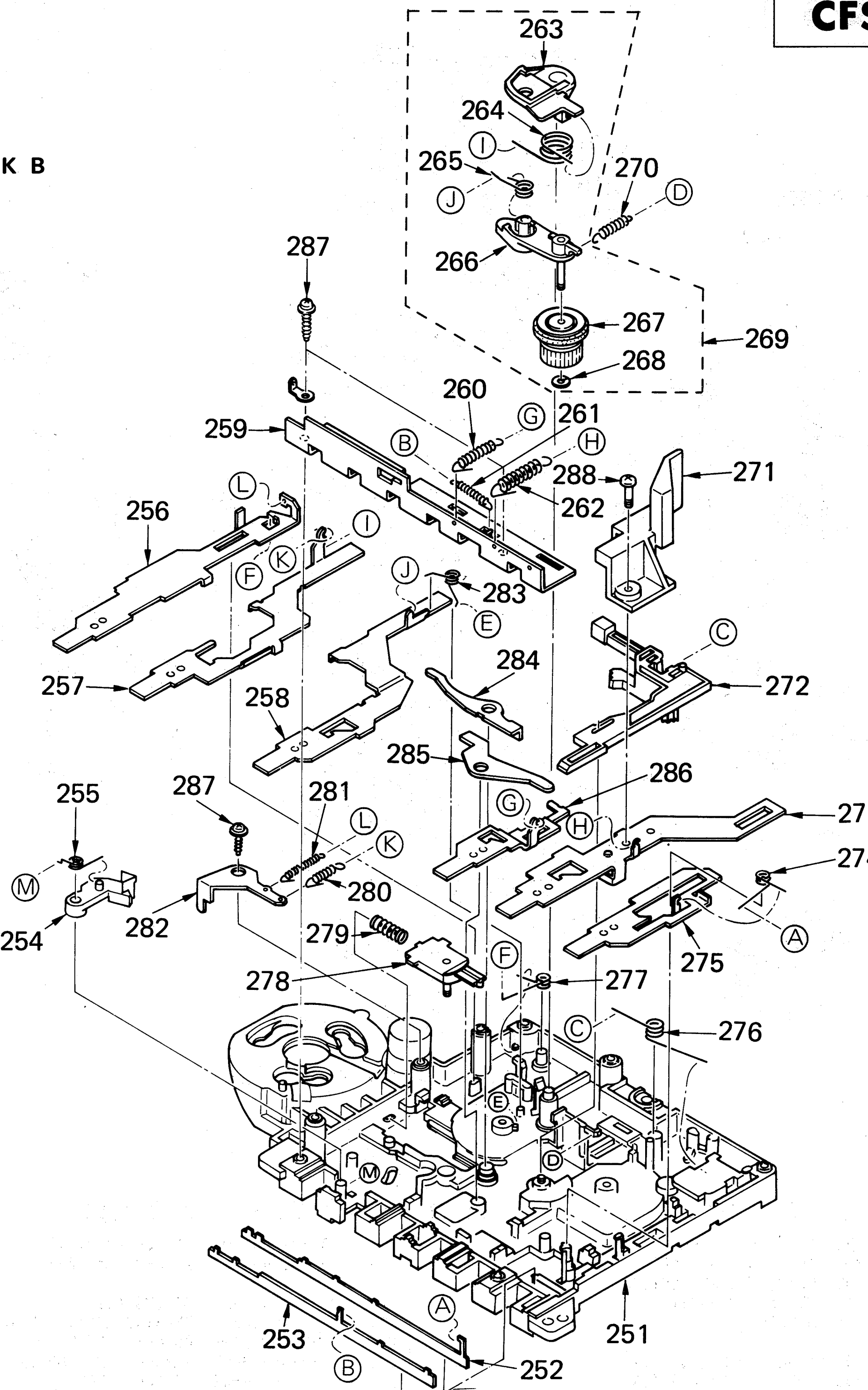
| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 201 | 3-313-380-01 | CLAW (A), EJECT | |
| 202 | A-3102-092-A | CHASSIS ASSY, MECHANICAL | |
| 203 | 3-313-357-00 | CLAW, REC PREVENTION | |
| 204 | 3-313-902-11 | SPRING, CASSETTE | |
| 205 | 3-701-437-21 | WASHER | |
| 206 | 3-313-305-00 | TABLE, REEL, SUPPLY | |
| 207 | 3-313-344-00 | SPRING, COMPRESSION | |
| 208 | 3-313-333-00 | CLAW, REEL | |
| 209 | 3-558-708-01 | WASHER, STOPPER | |
| 210 | 3-313-345-00 | SPRING, COMPRESSION | |
| 211 | A-3130-031-B | TABLE ASSY, REEL, TAKE-UP | |
| 212 | X-3313-311-1 | CHASSIS ASSY, HEAD | |
| 213 | 3-334-717-01 | BRACKET (M), HEAD | |
| 214 | 3-313-339-00 | SPRING | |
| 215 | 3-313-361-00 | ARM, ERASE HEAD | |
| 216 | 3-331-108-01 | LUG (T), SHIM (t=0.1) | |
| | 3-331-108-11 | LUG (T), SHIM (t=0.2) | |
| | 3-331-108-21 | LUG (T), SHIM (t=0.3) | |
| | 3-331-108-31 | LUG (T), SHIM (t=0.4) | |
| | 3-331-108-41 | LUG (T), SHIM (t=0.5) | |
| 217 | 3-578-138-01 | SHIM (t=0.1) | |
| | 3-578-138-11 | SHIM (t=0.2) | |
| | 3-578-138-21 | SHIM (t=0.3) | |
| 218 | 3-313-316-00 | PU | |
| 219 | 3-307-948-01 | WASHER, NYLON | |
| 220 | 3-703-597-41 | PINCH ROLLER, STANDARD | |
| 221 | 3-307-948-41 | WASHER, NYLON (t=0.3) | |

| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 222 | 3-701-438-01 | WASHER (t=0.13) | |
| | 3-701-438-11 | WASHER (t=0.25) | |
| 223 | *3-332-309-01 | SPRING (B) | |
| 224 | X-3319-945-1 | BEARING ASSY, CAPSTAN | |
| 225 | X-3330-617-1 | PULLEY, MOTOR | |
| 226 | 3-330-679-01 | BRACKET (M), MOTOR | |
| 227 | 9-911-844-XX | SPACER, LEAF | |
| 228 | X-3592-309-1 | FLYWHEEL (E) ASSY | |
| 229 | 3-313-389-01 | BELT | |
| 230 | 3-701-438-11 | WASHER, 2.5 | |
| 231 | 7-671-112-11 | BALL, STEEL (2.5MM DIA.) | |
| 232 | X-3313-307-0 | PULLEY ASSY, FWD | |
| 233 | 3-558-620-11 | GEAR, REWIND | |
| 234 | 3-341-181-01 | SPRING, TENSION | |
| 235 | 3-313-340-00 | SPRING, COMPRESSION | |
| 236 | 3-701-465-00 | SCREW, LOCK | |
| 237 | 7-621-772-40 | SCREW +B 2X8 | |
| 238 | 7-621-255-35 | SCREW (2MMX5), + PWH | |
| 239 | 3-324-220-01 | SCREW (B2.6), TAPPING | |
| 240 | 3-318-203-71 | SCREW (B1.7X5), TAPPING | |
| 241 | 3-324-219-01 | SCREW, PAN | |
| 242 | 7-621-259-25 | SCREW +P 2.6X4 | |
| 243 | 7-687-233-11 | SCREW (+ PTPWH) (2.6X6) | |
| 907 | *1-621-581-11 | PC BOARD, SW (B) | |
| HE101 | 8-658-096-02 | HEAD, ERASE | |
| HRP201 | 1-543-283-11 | HEAD, MAGNETIC (REC/PB) | |
| M902 | 1-541-317-11 | MOTOR | |

### (6). DECK B



| No. | Part No. | Description | Remarks |
|---|---|---|---|
| 251 | A-3102-092-A | CHASSIS ASSY, MECHANICAL | |
| 252 | *3-313-352-00 | PLATE (B), LOCK | |
| 253 | *3-313-351-11 | PLATE (A), LOCK | |
| 254 | 3-313-322-02 | LEVER (A), S.OFF | |
| 255 | 3-313-323-00 | SPRING | |
| 256 | *3-313-381-01 | LEVER (B), PAUSE BUTTON | |
| 257 | *3-313-353-00 | LEVER, FF BUTTON | |
| 258 | *3-313-354-00 | LEVER, REW BUTTON | |
| 259 | *3-313-359-00 | RETAINER, LEVER | |
| 260 | 3-313-369-00 | SPRING, TENSION | |
| 261 | 3-313-343-00 | SPRING, TENSION | |
| 262 | 3-322-529-01 | SPRING, TENSION | |
| 263 | 3-313-314-00 | LEVER (SI), FR | |
| 264 | 3-313-315-00 | SPRING | |
| 265 | 3-313-313-00 | SPRING | |
| 266 | X-3313-304-0 | ARM ASSY, REW | |
| 267 | X-3313-312-1 | IDLER ASSY, FR | |
| 268 | 3-558-708-01 | WASHER, STOPPER | |
| 269 | A-3136-041-B | IDLER COMPLETE ASSY, FR | |
| 270 | 3-313-365-00 | SPRING, TENSION | |
| 271 | 3-339-308-01 | LEVER, REC | |
| 272 | 3-313-356-00 | BRAKE | |
| 273 | *3-313-350-00 | LEVER, REC BUTTON | |
| 274 | 3-313-331-00 | SPRING | |
| 275 | *3-313-325-00 | LEVER, STOP BUTTON | |
| 276 | 3-313-327-00 | SPRING | |
| 277 | 3-313-378-01 | SPRING (A) | |
| 278 | X-3313-301-0 | BRACKET ASSY, T PULLEY | |
| 279 | 3-573-464-00 | SPRING, COMPRESSION | |
| 280 | 3-313-348-00 | SPRING, TENSION | |
| 281 | 3-313-349-00 | SPRING, TENSION | |
| 282 | *3-332-310-01 | HOOK, SPRING | |
| 283 | 3-313-338-00 | SPRING | |
| 284 | *3-313-320-11 | LEVER, RCP | |
| 285 | *3-313-321-00 | LEVER, PREVENTION, RFR | |
| 286 | *3-313-326-00 | LEVER, FWD BUTTON | |
| 287 | 7-687-233-11 | SCREW (+ PTPWH) (2.6X6) | |
| 288 | 7-621-259-55 | SCREW +BVTT 2.6X8 (S) | |

# SECTION 4
# ELECTRICAL PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| 901 | *1-623-359-11 | PC BOARD, POWER | | | |
| 902 | *A-3270-428-A | (AEP)...PC BOARD ASSY, MAIN | | | |
| | *A-3270-431-A | (E).....PC BOARD ASSY, MAIN | | | |
| 903 | *A-3219-129-A | (AEP)...PC BOARD ASSY, DISPLAY | | | |
| | *A-3219-131-A | (E).....PC BOARD ASSY, DISPLAY | | | |
| 904 | *A-3266-416-A | (AEP)...PC BOARD ASSY, TUNER | | | |
| | *A-3266-421-A | (E).....PC BOARD ASSY, TUNER | | | |
| 905 | *1-621-580-11 | PC BOARD, SW (A) | | | |
| 906 | *1-602-735-00 | PC BOARD, PLUNGER SOLENOID | | | |
| 907 | *1-621-581-11 | PC BOARD, SW (B) | | | |
| 908 | *1-623-357-11 | PC BOARD, D.D CON | | | |
| 909 | *1-623-358-11 | PC BOARD, G.EQ | | | |
| 910 | 1-533-183-11 | HOLDER, FUSE | | | |
| ANT1 | 1-501-222-41 | ANTENNA, TELESCOPIC (FM/SW) | | | |
| ANT2 | 1-501-222-41 | ANTENNA, TELESCOPIC (FM/SW) | | | |
| C1 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C2 | 1-102-973-00 | CERAMIC | 100PF | 5% | 50V |
| C3 | 1-162-194-31 | CERAMIC | 3.9PF | 10% | 50V |
| C4 | 1-162-197-31 | CERAMIC | 6.8PF | 10% | 50V |
| C5 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C6 | 1-124-123-00 | ELECT | 100MF | 20% | 6.3V |
| C7 | 1-161-023-00 | CERAMIC | 0.068MF | 10% | 25V |
| C8 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C9 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C10 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C11 | 1-102-934-00 | CERAMIC | 1PF | 0.25PF | 50V |
| C12 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C13 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C14 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C15 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C16 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C17 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C18 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C19 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C20 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C21 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C22 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C23 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C24 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C25 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C26 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C27 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C28 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C29 | 1-104-067-11 | POLYSTYRENE | 390PF | 5% | 50V |
| C30 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C31 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C32 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C33 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C34 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C35 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C36 | 1-102-963-00 | CERAMIC | 33PF | 5% | 50V |
| C40 | 1-162-198-31 | CERAMIC | 8.2PF | 10% | 50V |
| C41 | 1-162-193-31 | CERAMIC | 3.3PF | 10% | 50V |
| C42 | 1-162-198-31 | CERAMIC | 8.2PF | 10% | 50V |
| C43 | 1-102-406-61 | CERAMIC | 2PF | 0.25PF | 50V |
| C44 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C45 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C46 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C47 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C48 | 1-102-959-00 | CERAMIC | 22PF | 5% | 50V |
| C49 | 1-161-057-00 | CERAMIC | 0.033MF | 10% | 25V |
| C50 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C51 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C52 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C53 | 1-102-959-00 | CERAMIC | 22PF | 5% | 50V |
| C54 | 1-102-959-00 | CERAMIC | 22PF | 5% | 50V |
| C55 | 1-162-197-31 | CERAMIC | 6.8PF | 10% | 50V |
| C56 | 1-102-816-00 | CERAMIC | 120PF | 5% | 50V |
| C57 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C60 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C61 | 1-123-330-00 | ELECT | 22MF | 20% | 25V |
| C62 | 1-124-463-00 | ELECT | 0.1MF | 20% | 50V |
| C63 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C64 | 1-102-962-00 | CERAMIC | 30PF | 5% | 50V |
| C65 | 1-102-945-00 | CERAMIC | 8PF | 0.5PF | 50V |
| C66 | 1-123-356-00 | ELECT | 10MF | 20% | 50V |
| C67 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C68 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C69 | 1-161-055-00 | CERAMIC | 0.022MF | 10% | 25V |
| C70 | 1-102-110-00 | CERAMIC | 220PF | 10% | 50V |
| C71 | 1-102-125-00 | CERAMIC | 0.0047MF | 10% | 50V |
| C72 | 1-123-330-00 | ELECT | 22MF | 20% | 25V |
| C73 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C74 | 1-123-379-00 | ELECT | 0.47MF | 20% | 50V |
| C75 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C76 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C77 | 1-161-053-00 | CERAMIC | 0.015MF | 10% | 25V |
| C78 | 1-161-053-00 | CERAMIC | 0.015MF | 10% | 25V |
| C79 | 1-123-379-00 | ELECT | 0.47MF | 20% | 50V |
| C80 | 1-123-379-00 | ELECT | 0.47MF | 20% | 50V |

## ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| C81 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C82 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C83 | 1-124-472-11 | ELECT | 470MF | 20% | 6.3V |
| C84 | 1-123-356-00 | ELECT | 10MF | 20% | 16V |
| C85 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C90 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C91 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C92 | 1-102-973-00 | CERAMIC | 100PF | 5% | 50V |
| C93 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C94 | 1-161-055-00 | CERAMIC | 0.022MF | 10% | 50V |
| C101 | 1-102-115-00 | CERAMIC | 560PF | 10% | 50V |
| C102 | 1-102-110-00 | CERAMIC | 220PF | 10% | 50V |
| C103 | 1-102-115-00 | CERAMIC | 560PF | 10% | 50V |
| C104 | 1-102-110-00 | CERAMIC | 220PF | 10% | 50V |
| C105 | 1-130-484-00 | MYLAR | 0.012MF | 5% | 50V |
| C106 | 1-161-020-11 | CERAMIC | 0.039MF | 10% | 25V |
| C107 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C108 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C109 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C110 | 1-102-110-00 | CERAMIC | 220PF | 10% | 50V |
| C111 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C113 | 1-161-054-00 | CERAMIC | 0.018MF | 10% | 25V |
| C114 | 1-161-055-00 | CERAMIC | 0.022MF | 10% | 25V |
| C115 | 1-102-106-00 | CERAMIC | 100PF | 10% | 50V |
| C116 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C117 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C118 | 1-161-047-00 | CERAMIC | 0.0047MF | 10% | 25V |
| C119 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C120 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C121 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C122 | 1-126-101-11 | ELECT | 100MF | 20% | 10V |
| C123 | 1-123-299-00 | ELECT | 1000MF | 20% | 6.3V |
| C124 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C125 | 1-130-497-00 | MYLAR | 0.15MF | 5% | 50V |
| C126 | 1-136-165-00 | (AEP)...FILM | 0.1MF | 5% | 50V |
| C127 | 1-102-106-00 | CERAMIC | 100PF | 10% | 50V |
| C151 | 1-123-306-00 | (AEP)...ELECT | 47MF | 20% | 10V |
| C201 | 1-102-115-00 | CERAMIC | 560PF | 10% | 50V |
| C202 | 1-102-110-00 | CERAMIC | 220PF | 10% | 50V |
| C203 | 1-102-115-00 | CERAMIC | 560PF | 10% | 50V |
| C204 | 1-102-110-00 | CERAMIC | 220PF | 10% | 50V |
| C205 | 1-130-484-00 | MYLAR | 0.012MF | 5% | 50V |
| C206 | 1-161-020-11 | CERAMIC | 0.039MF | 10% | 25V |
| C207 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C208 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C209 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C210 | 1-102-110-00 | CERAMIC | 220PF | 10% | 50V |
| C211 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C213 | 1-161-054-00 | CERAMIC | 0.018MF | 10% | 25V |
| C214 | 1-161-055-00 | CERAMIC | 0.022MF | 10% | 25V |
| C215 | 1-102-106-00 | CERAMIC | 100PF | 10% | 50V |
| C216 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C217 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C218 | 1-161-047-00 | CERAMIC | 0.0047MF | 10% | 25V |
| C219 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C220 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C221 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |

## ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| C222 | 1-126-101-11 | ELECT | 100MF | 20% | 10V |
| C223 | 1-123-299-00 | ELECT | 1000MF | 20% | 6.3V |
| C224 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C225 | 1-130-497-00 | MYLAR | 0.15MF | 5% | 50V |
| C226 | 1-136-165-00 | (AEP)...FILM | 0.1MF | 5% | 50V |
| C227 | 1-102-106-00 | CERAMIC | 100PF | 10% | 50V |
| C251 | 1-123-306-00 | (AEP)...ELECT | 47MF | 20% | 10V |
| C301 | 1-123-379-00 | ELECT | 0.47MF | 20% | 50V |
| C302 | 1-123-379-00 | ELECT | 0.47MF | 20% | 50V |
| C303 | 1-124-464-11 | ELECT | 0.22MF | 20% | 50V |
| C304 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C305 | 1-161-053-00 | CERAMIC | 0.015MF | 10% | 25V |
| C306 | 1-123-330-00 | ELECT | 22MF | 20% | 16V |
| C307 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C308 | 1-126-101-11 | ELECT | 100MF | 20% | 10V |
| C309 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C310 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C312 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C313 | 1-124-124-00 | ELECT | 220MF | 20% | 10V |
| C314 | 1-124-124-00 | ELECT | 220MF | 20% | 10V |
| C315 | 1-126-101-11 | ELECT | 100MF | 20% | 10V |
| C316 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C317 | 1-123-321-00 | ELECT | 220MF | 20% | 16V |
| C318 | 1-123-332-00 | ELECT | 47MF | 20% | 16V |
| C319 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C320 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C321 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C322 | 1-124-124-00 | ELECT | 220MF | 20% | 10V |
| C323 | 1-130-479-00 | MYLAR | 0.0047MF | 5% | 50V |
| C324 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C325 | 1-130-467-00 | MYLAR | 470PF | 5% | 50V |
| C326 | 1-102-106-00 | (AEP)...CERAMIC | 100PF | 10% | 50V |
| C327 | 1-123-306-00 | ELECT | 47MF | 20% | 10V |
| C328 | 1-161-021-11 | CERAMIC | 0.047MF | 10% | 25V |
| C330 | 1-123-379-00 | ELECT | 0.47MF | 20% | 50V |
| C331 | 1-161-046-00 | CERAMIC | 0.0039MF | 10% | 25V |
| C332 | 1-123-380-00 | ELECT | 1MF | 20% | 50V |
| C333 | 1-123-330-00 | ELECT | 22MF | 20% | 16V |
| C334 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C335 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C337 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C338 | 1-123-310-00 | ELECT | 470MF | 20% | 10V |
| C339 | 1-126-101-11 | ELECT | 100MF | 20% | 10V |
| C342 | 1-126-101-11 | ELECT | 100MF | 20% | 10V |
| C345 | 1-162-294-31 | CERAMIC | 0.001MF | 10% | 50V |
| C401 | 1-123-611-00 | ELECT | 1MF | 20% | 50V |
| C402 | 1-102-106-00 | CERAMIC | 100PF | 10% | 50V |
| C403 | 1-161-054-00 | CERAMIC | 0.018MF | 10% | 25V |
| C404 | 1-124-254-00 | ELECT | 0.68MF | 20% | 50V |
| C405 | 1-161-047-00 | CERAMIC | 0.0047MF | 10% | 25V |
| C406 | 1-124-464-11 | ELECT | 0.22MF | 20% | 50V |
| C407 | 1-161-043-00 | CERAMIC | 0.0022MF | 10% | 25V |
| C408 | 1-161-023-00 | CERAMIC | 0.068MF | 10% | 25V |
| C409 | 1-162-291-31 | CERAMIC | 560PF | 10% | 50V |
| C410 | 1-161-053-00 | CERAMIC | 0.015MF | 10% | 25V |
| C411 | 1-124-245-00 | ELECT | 4.7MF | 20% | 35V |
| C412 | 1-124-245-00 | ELECT | 4.7MF | 20% | 35V |
| C413 | 1-161-053-00 | CERAMIC | 0.015MF | 10% | 25V |

## ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| C414 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C451 | 1-123-611-00 | ELECT | 1MF | 20% | 50V |
| C452 | 1-102-106-00 | CERAMIC | 100PF | 10% | 50V |
| C453 | 1-161-054-00 | CERAMIC | 0.018MF | 10% | 25V |
| C454 | 1-124-254-00 | ELECT | 0.68MF | 20% | 50V |
| C455 | 1-161-047-00 | CERAMIC | 0.0047MF | 10% | 25V |
| C456 | 1-124-464-11 | ELECT | 0.22MF | 20% | 50V |
| C457 | 1-161-043-00 | CERAMIC | 0.0022MF | 10% | 25V |
| C458 | 1-161-023-00 | CERAMIC | 0.068MF | 10% | 25V |
| C459 | 1-162-291-31 | CERAMIC | 560PF | 10% | 50V |
| C460 | 1-161-053-00 | CERAMIC | 0.015MF | 10% | 25V |
| C461 | 1-124-245-00 | ELECT | 4.7MF | 20% | 35V |
| C462 | 1-124-245-00 | ELECT | 4.7MF | 20% | 35V |
| C463 | 1-161-053-00 | CERAMIC | 0.015MF | 10% | 25V |
| C464 | 1-102-074-00 | CERAMIC | 0.001MF | 10% | 50V |
| C601 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C602 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C603 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C604 | 1-162-294-31 | CERAMIC | 0.001MF | 10% | 50V |
| C605 | 1-162-203-31 | CERAMIC | 15PF | 5% | 50V |
| C606 | 1-102-964-00 | CERAMIC | 36PF | 5% | 50V |
| C608 | 1-131-368-00 | TANTALUM | 3.3MF | 20% | 16V |
| C609 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C610 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C611 | 1-162-294-31 | CERAMIC | 0.001MF | 10% | 50V |
| C612 | 1-162-851-11 | CERAMIC | 0.1MF | 20% | 16V |
| C613 | 1-162-851-11 | CERAMIC | 0.1MF | 20% | 16V |
| C614 | 1-161-494-00 | CERAMIC | 0.022MF | | 25V |
| C615 | 1-131-379-00 | TANTALUM | 22MF | 20% | 6.3V |
| C616 | 1-123-611-00 | ELECT | 1MF | 20% | 50V |
| C617 | 1-123-611-00 | ELECT | 1MF | 20% | 50V |
| C618 | 1-161-494-00 | CERAMIC | 0.022MF | | 25V |
| C619 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C620 | 1-161-494-00 | CERAMIC | 0.022MF | | 25V |
| C621 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C622 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C623 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C624 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C625 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C801 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C802 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C803 | 1-101-005-00 | CERAMIC | 0.022MF | | 50V |
| C804 | 1-124-887-00 | ELECT | 3300MF | 20% | 16V |
| C851 | 1-101-001-00 | CERAMIC | 0.001MF | | 50V |
| C852 | 1-123-369-00 | ELECT | 4.7MF | 20% | 50V |
| C853 | 1-102-959-00 | CERAMIC | 22PF | 5% | 50V |
| C854 | 1-162-851-11 | CERAMIC | 0.1MF | 20% | 16V |
| C855 | 1-124-123-00 | ELECT | 100MF | 20% | 6.3V |
| C856 | 1-101-001-00 | CERAMIC | 0.001MF | | 50V |
| C857 | 1-101-880-00 | CERAMIC | 47PF | 5% | 50V |
| C858 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| C859 | 1-161-379-00 | CERAMIC | 0.01MF | 30% | 16V |
| CF1 | 1-567-245-11 | FILTER, CERAMIC (FM,10.7MHz) | | | |
| CF2 | 1-567-309-11 | FILTER, CERAMIC (AM,450kHz) | | | |
| CF3 | 1-567-245-11 | FILTER, CERAMIC (10.7MHz) | | | |
| CF4 | 1-567-164-00 | VIBRATOR, CERAMIC (76kHz) | | | |
| CF5 | 1-567-895-11 | FILTER, CERAMIC (AM,1ST IF,10.7MHz) | | | |

## ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---|---|---|
| CNJ1 | *1-562-681-11 | CONNECTOR, SMALL MICRO 4P |
| CNJ1 | *1-562-683-11 | CONTACT, SMALL MICRO (FOR ALL CNJ(B)S) |
| CNJ6 | *1-562-682-11 | CONNECTOR, SMALL MICRO 6P |
| CNJ10 | 1-563-205-11 | CONNECTOR, SMALL MICRO 3P |
| CNJ11 | *1-563-208-11 | CONNECTOR, SMALL MICRO 8P |
| CNJ13 | *1-563-307-11 | CONNECTOR (SOCKET) 2P |
| CNJ15 | *1-563-209-11 | (AEP)...CONNECTOR, SMALL MICRO 9P |
| CNJ25 | 1-563-206-11 | CONNECTOR, SMALL MICRO 5P |
| CNJ27 | *1-562-680-31 | CONNECTOR, SMALL MICRO 2P |
| CNJ31 | *1-562-681-21 | CONNECTOR, SMALL MICRO (B) 4P |
| CNJ31 | *1-563-974-11 | HOUSING, CONNECTOR (A) 4P |
| CNJ31 | *1-566-497-11 | PIN, CONNECTOR (FOR ALL CNJ(A)S) |
| CNJ32-1 | *1-562-681-11 | CONNECTOR, SMALL MICRO (B) 4P |
| CNJ32-2 | *1-562-680-21 | CONNECTOR, SMALL MICRO (B) 2P |
| CNJ32 | *1-563-976-11 | HOUSING, CONNECTOR (A) 6P |
| CNJ33 | 1-563-206-11 | CONNECTOR, SMALL MICRO (B) 5P |
| CNJ33 | *1-563-975-11 | HOUSING, CONNECTOR (A) 5P |
| CNJ34 | *1-562-680-41 | CONNECTOR, SMALL MICRO 2P |
| CNJ35 | *1-563-205-11 | CONNECTOR, SMALL MICRO 3P |
| CNJ36 | *1-563-209-11 | (E)...CONNECTOR, SMALL MICRO 9P |
| CNJ801 | 1-526-838-11 | INLET, AC 2P (AC/DC) |
| CNP1 | *1-564-778-11 | PLUG, CONNECTOR (2.5MM) 4P |
| CNP6 | *1-564-779-11 | PLUG, CONNECTOR (2.5MM) 6P |
| CNP10 | *1-506-707-11 | PLUG, CONNECTOR (2.5MM) 3P |
| CNP11 | *1-506-710-11 | PLUG, CONNECTOR (2.5MM) 8P |
| CNP13 | *1-560-530-00 | PIN, CONNECTOR 2P |
| CNP15 | *1-506-711-11 | (AEP)...PLUG, CONNECTOR (2.5MM) 9P |
| CNP25 | *1-506-708-11 | PLUG, CONNECTOR (2.5MM) 5P |
| CNP27 | *1-564-777-31 | PLUG, CONNECTOR (2.5MM) 2P |
| CNP31 | *1-564-778-11 | PLUG, CONNECTOR (2.5MM) 4P |
| CNP32-1 | *1-564-778-21 | PLUG, CONNECTOR (2.5MM) 4P |
| CNP32-2 | *1-564-777-21 | PLUG, CONNECTOR (2.5MM) 2P |
| CNP33 | *1-506-708-11 | PLUG, CONNECTOR (2.5MM) 5P |
| CNP34 | *1-564-777-41 | PLUG, CONNECTOR (2.5MM) 2P |
| CNP35 | *1-506-707-11 | PLUG, CONNECTOR (2.5MM) 3P |
| CNP36 | *1-506-711-11 | (E)...PLUG, CONNECTOR (2.5MM) 9P |
| CNP37 | *1-506-707-21 | PLUG, CONNECTOR (2.5MM) 3P |
| CNP50 | *1-560-531-11 | (AEP)...PIN, CONNECTOR 5P |
| CNP401 | *1-564-782-11 | PIN, CONNECTOR 4P |
| CNP402 | *1-564-782-11 | PIN, CONNECTOR 4P |
| CP1 | 1-235-171-00 | FILTER, BAND PASS (FM) |
| CT3 | 1-141-290-11 | CAP, VAR FILM TRIMMER |
| CT3 | 1-141-290-31 | CAP, VAR FILM TRIMMER |
| D1 | 8-719-908-57 | DIODE SVC203 |
| D2 | 8-719-908-57 | DIODE SVC203 |
| D3 | 8-719-936-68 | DIODE KV1260 |
| D4 | 8-719-920-70 | DIODE 1SS135E |
| D5 | 8-719-920-70 | DIODE 1SS135E |
| D6 | 8-719-920-70 | DIODE 1SS135E |
| D7 | 8-719-920-70 | DIODE 1SS135E |
| D8 | 8-719-920-70 | DIODE 1SS135E |
| D9 | 8-719-920-70 | DIODE 1SS135E |
| D10 | 8-719-920-70 | DIODE 1SS135E |
| D11 | 8-719-920-70 | DIODE 1SS135E |
| D12 | 8-719-920-70 | DIODE 1SS135E |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---|---|---|
| D13 | 8-719-901-33 | DIODE 1SS133 |
| D14 | 8-719-901-33 | DIODE 1SS133 |
| D15 | 8-719-901-33 | DIODE 1SS133 |
| D16 | 8-719-901-33 | DIODE 1SS133 |
| D17 | 8-719-901-33 | DIODE 1SS133 |
| D18 | 8-719-901-33 | DIODE 1SS133 |
| D19 | 8-719-901-33 | DIODE 1SS133 |
| D20 | 8-719-901-33 | DIODE 1SS133 |
| D21 | 8-719-901-33 | DIODE 1SS133 |
| D22 | 8-719-901-33 | DIODE 1SS133 |
| D23 | 8-719-901-33 | DIODE 1SS133 |
| D24 | 8-719-901-33 | DIODE 1SS133 |
| D25 | 8-719-901-33 | DIODE 1SS133 |
| D26 | 8-719-901-33 | DIODE 1SS133 |
| D27 | 8-719-901-33 | DIODE 1SS133 |
| D101 | 8-719-901-33 | DIODE 1SS133 |
| D102 | 8-719-901-33 | DIODE 1SS133 |
| D201 | 8-719-901-33 | DIODE 1SS133 |
| D202 | 8-719-901-33 | DIODE 1SS133 |
| D302 | 8-719-901-33 | DIODE 1SS133 |
| D303 | 8-719-100-41 | DIODE RD6.8EB2 |
| D308 | 1-807-738-11 | DIODE SLR-34VR70F/30 (OPR/BATT) |
| D312 | 8-719-901-33 | DIODE 1SS133 |
| D313 | 8-719-901-33 | DIODE 1SS133 |
| D316 | 8-719-901-33 | DIODE 1SS133 |
| D317 | 8-719-901-33 | DIODE 1SS133 |
| D318 | 8-719-901-33 | DIODE 1SS133 |
| D501 | 8-719-901-33 | DIODE 1SS133 |
| D601 | 8-719-901-33 | DIODE 1SS133 |
| D602 | 8-719-901-33 | DIODE 1SS133 |
| D603 | 8-719-901-33 | DIODE 1SS133 |
| D604 | 8-719-901-33 | DIODE 1SS133 |
| D605 | 8-719-901-33 | DIODE 1SS133 |
| D606 | 8-719-812-41 | DIODE TLR124 (FM STEREO) |
| D801 | 1-807-739-11 | DIODE IN4002AT-92 |
| D802 | 1-807-739-11 | DIODE IN4002AT-92 |
| D803 | 1-807-739-11 | DIODE IN4002AT-92 |
| D804 | 1-807-739-11 | DIODE IN4002AT-92 |
| D851 | 8-719-100-71 | DIODE RD15E-B2 |
| D852 | 8-719-901-33 | DIODE 1SS133 |
| D853 | 8-719-901-33 | DIODE 1SS133 |
| F801 ⚠ | 1-532-967-11 | (AEP)...FUSE (T 1.25A) |
| F802 ⚠ | 1-532-611-00 | (E).....FUSE (T 0.125A) |
| IC1 | 8-759-908-89 | IC CX20029 |
| IC2 | 8-759-800-53 | IC LA5004 |
| IC3 | 8-759-240-28 | IC TC4028BP |
| IC4 | 8-759-103-49 | IC UPA76HA-F |
| IC301 | 8-759-803-27 | IC LA3245 |
| IC302 | 8-759-803-28 | IC LA3240 |
| IC303 | 8-759-205-82 | IC KIA7282AP |
| IC304 | 8-759-905-47 | IC BA338 |
| IC401 | 1-807-737-11 | IC BA3824LS |
| IC601 | 8-759-140-88 | IC UPD1715G-541-21 |
| J301 | 1-507-643-00 | JACK (MIX MIC) |
| J302 | 1-562-837-11 | JACK (PHONES) |
| J303 | 1-563-716-11 | JACK, PIN 2P (LINE IN) |
| L1 | *1-422-038-00 | COIL, AIR-CORE (FM ANTENNA) |
| L2 | *1-459-703-11 | COIL (WITH CORE)(FM OSC) |
| L3 | 1-410-334-11 | MICRO INDUCTOR 100UH |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---|---|---|
| L4 | 1-459-768-11 | (AEP)...COIL, ANTENNA (SW1) |
| L4 | 1-459-768-11 | (E).....COIL, ANTENNA (SW1) |
| L5 | 1-459-767-11 | (AEP)...COIL, ANTENNA (SW2) |
| L5 | 1-459-767-11 | (E).....COIL, ANTENNA (SW2) |
| L6 | 1-459-766-11 | (AEP)...COIL, ANTENNA (SW3) |
| L6 | 1-459-766-11 | (E).....COIL, ANTENNA (SW3) |
| L7 | 1-459-765-11 | (AEP)...COIL, ANTENNA (SW4) |
| L7 | 1-459-765-11 | (E).....COIL, ANTENNA (SW4) |
| L8 | 1-459-764-11 | (AEP)...COIL, ANTENNA (SW5) |
| L8 | 1-459-764-11 | (E).....COIL, ANTENNA (SW5) |
| L9 | 1-459-763-11 | (AEP)...COIL, ANTENNA (SW6) |
| L9 | 1-459-763-11 | (E).....COIL, ANTENNA (SW6) |
| L10 | 1-459-762-11 | (AEP)...COIL, ANTENNA (SW7) |
| L10 | 1-459-762-11 | (E).....COIL, ANTENNA (SW7) |
| L11 | 1-410-334-11 | MICRO INDUCTOR 100UH |
| L12 | 1-402-291-11 | COIL, FERRITE ROD ANTENNA (MW/LW) |
| L13 | 1-426-329-11 | (AEP)...COIL, RF (MW) |
| L13 | 1-426-329-11 | (E).....COIL, RF (MW) |
| L14 | 1-406-245-11 | (AEP)...COIL, OSC (MW/LW) |
| L14 | 1-406-245-11 | (E).....COIL, OSC (MW) |
| L15 | 1-410-328-11 | MICRO INDUCTOR 10UH |
| L16 | 1-408-417-00 | MICRO INDUCTOR 47UH |
| L17 | 1-410-328-11 | MICRO INDUCTOR 10UH |
| L19 | 1-410-320-11 | MICRO INDUCTOR 2.2UH |
| L101 | 1-407-961-00 | MICRO INDUCTOR 2.7MMH |
| L201 | 1-407-961-00 | MICRO INDUCTOR 2.7MMH |
| L601 | 1-410-334-11 | MICRO INDUCTOR 100UH |
| L851 | 1-410-328-11 | MICRO INDUCTOR 10UH |
| L852 | 1-410-328-11 | MICRO INDUCTOR 10UH |
| LCD601 | 1-807-841-11 | DISPLAY PANEL, LIQUID CRYSTAL |
| MIC301 | 8-814-186-00 | MICROPHONE, ELECTRET CONDENSER |
| Q1 | 8-729-178-62 | TRANSISTOR 2SC2786-L |
| Q2 | 8-729-178-62 | TRANSISTOR 2SC2786-L |
| Q3 | 8-729-119-35 | TRANSISTOR 2SK193-K |
| Q4 | 8-729-178-73 | TRANSISTOR 2SC2787 |
| Q5 | 8-729-119-35 | TRANSISTOR 2SK193-K |
| Q6 | 8-729-178-73 | TRANSISTOR 2SC2787 |
| Q7 | 8-729-178-62 | TRANSISTOR 2SC2786-L |
| Q8 | 8-729-178-62 | TRANSISTOR 2SC2786-L |
| Q9 | 8-729-178-62 | TRANSISTOR 2SC2786-L |
| Q10 | 8-729-178-73 | TRANSISTOR 2SC2787 |
| Q11 | 8-729-178-73 | TRANSISTOR 2SC2787 |
| Q12 | 8-729-178-73 | TRANSISTOR 2SC2787 |
| Q13 | 8-729-900-80 | TRANSISTOR DTC114ES |
| Q14 | 1-807-533-11 | TRANSISTOR KSC945C |
| Q15 | 8-729-900-80 | TRANSISTOR DTC114ES |
| Q16 | 8-729-900-80 | TRANSISTOR DTC114ES |
| Q17 | 8-729-900-80 | TRANSISTOR DTC114ES |
| Q18 | 8-729-900-80 | TRANSISTOR DTC114ES |
| Q19 | 8-729-117-54 | TRANSISTOR 2SA1175 |
| Q20 | 1-807-533-11 | TRANSISTOR KSC945C |
| Q21 | 8-729-900-80 | TRANSISTOR DTC114ES |
| Q22 | 8-729-900-80 | TRANSISTOR DTC114ES |
| Q23 | 8-729-117-54 | TRANSISTOR 2SA1175 |
| Q24 | 8-729-900-80 | TRANSISTOR DTC114ES |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| Q25 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q26 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q27 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q101 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q151 | 1-807-537-21 | (AEP)...TRANSISTOR KSA733C-Y | | | |
| Q201 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q251 | 1-807-537-21 | (AEP)...TRANSISTOR KSA733C-Y | | | |
| Q301 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q302 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q303 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q304 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q305 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q306 | 8-729-100-12 | TRANSISTOR 2SC2001-L | | | |
| Q307 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q309 | 8-729-100-12 | TRANSISTOR 2SC2001-L | | | |
| Q310 | 1-807-537-21 | TRANSISTOR KSA733C-Y | | | |
| Q311 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q312 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q313 | 1-807-537-21 | TRANSISTOR KSA733C-Y | | | |
| Q314 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q315 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q316 | 1-807-537-21 | TRANSISTOR KSA733C-Y | | | |
| Q317 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q320 | 1-807-537-21 | TRANSISTOR KSA733C-Y | | | |
| Q321 | 1-807-533-11 | TRANSISTOR KSC945C | | | |
| Q350 | 1-807-533-11 | (AEP)...TRANSISTOR KSA945C | | | |
| Q601 | 8-729-178-62 | TRANSISTOR 2SC2786-L | | | |
| Q602 | 8-729-178-62 | TRANSISTOR 2SC2786-L | | | |
| Q603 | 8-729-178-62 | TRANSISTOR 2SC2786-L | | | |
| Q604 | 8-729-119-32 | TRANSISTOR 2SK193 | | | |
| Q605 | 8-729-853-63 | TRANSISTOR 2SC536SP | | | |
| Q606 | 8-729-119-32 | TRANSISTOR 2SK193 | | | |
| Q851 | 8-729-853-63 | TRANSISTOR 2SC536SP | | | |
| Q852 | 8-729-853-63 | TRANSISTOR 2SC536SP | | | |
| R1 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R2 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R3 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R4 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R5 | 1-247-876-00 | CARBON | 75K | 5% | 1/4W |
| R6 | 1-247-876-00 | CARBON | 75K | 5% | 1/4W |
| R7 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R8 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R9 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R10 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R11 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R12 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R13 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R14 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R15 | 1-215-486-00 | CARBON | 510K | 5% | 1/4W |
| R16 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R17 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R18 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R19 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R20 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R21 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R22 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R23 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R24 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| R25 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R26 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R27 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R28 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R29 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R30 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W |
| R31 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W |
| R32 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R33 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R34 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R35 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W |
| R40 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R41 | 1-249-441-11 | CARBON | 100K | 5% | 1/6W |
| R42 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R43 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R44 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R45 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R46 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R47 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R48 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R49 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R50 | 1-249-439-11 | CARBON | 68K | 5% | 1/6W |
| R51 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R52 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R53 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R54 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R55 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R56 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R57 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R58 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R60 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R61 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R62 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R63 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R64 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R65 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |
| R66 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R67 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R68 | 1-215-442-00 | CARBON | 7.5K | 5% | 1/4W |
| R69 | 1-215-442-00 | CARBON | 7.5K | 5% | 1/4W |
| R70 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R71 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R72 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R73 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R74 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R75 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R76 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R77 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R78 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R79 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R80 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R81 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R82 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R83 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R84 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R85 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R86 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| R88 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R89 | 1-249-417-11 | CARBON | 1K | 5% | 1/6W |
| R90 | 1-249-429-11 | CARBON | 10K | 5% | 1/6W |
| R91 | 1-249-411-11 | CARBON | 330 | 5% | 1/6W |
| R92 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R93 | 1-249-435-11 | CARBON | 33K | 5% | 1/6W |
| R94 | 1-249-401-11 | CARBON | 47 | 5% | 1/6W |
| R101 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R102 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R103 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R104 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R105 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R106 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R107 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R108 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R109 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R110 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R111 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R112 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R113 | 1-215-464-00 | CARBON | 62K | 5% | 1/4W |
| R114 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R115 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R116 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| R117 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R118 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R119 | 1-249-403-11 | CARBON | 68 | 5% | 1/4W |
| R122 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R151 | 1-249-417-11 | (AEP)...CARBON | 1K | 5% | 1/6W |
| R152 | 1-249-417-11 | (AEP)...CARBON | 1K | 5% | 1/6W |
| R153 | 1-249-429-11 | (AEP)...CARBON | 10K | 5% | 1/6W |
| R154 | 1-249-405-11 | (AEP)...CARBON | 100 | 5% | 1/6W |
| R201 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R202 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R203 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R204 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R205 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R206 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R207 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R208 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R209 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R210 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R211 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R212 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R213 | 1-215-464-00 | CARBON | 62K | 5% | 1/4W |
| R214 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R215 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R216 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| R217 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R218 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R219 | 1-249-403-11 | CARBON | 68 | 5% | 1/4W |
| R222 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R251 | 1-249-417-11 | (AEP)...CARBON | 1K | 5% | 1/6W |
| R252 | 1-249-417-11 | (AEP)...CARBON | 1K | 5% | 1/6W |
| R253 | 1-249-429-11 | (AEP)...CARBON | 10K | 5% | 1/6W |
| R254 | 1-249-405-11 | (AEP)...CARBON | 100 | 5% | 1/6W |
| R301 | 1-249-412-11 | CARBON | 390 | 5% | 1/4W |
| R302 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| R303 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R304 | 1-249-407-11 | CARBON | 150 | 5% | 1/4W |
| R305 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R306 | 1-247-849-00 | CARBON | 5.6K | 5% | 1/4W |
| R307 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R308 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R309 | 1-247-849-00 | CARBON | 5.6K | 5% | 1/4W |
| R310 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R311 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R312 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R313 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R314 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R315 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R316 | 1-249-402-11 | CARBON | 56 | 5% | 1/4W |
| R317 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W |
| R320 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R321 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R322 | 1-247-849-00 | CARBON | 5.6K | 5% | 1/4W |
| R323 | 1-249-402-11 | CARBON | 56 | 5% | 1/4W |
| R324 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R325 ⚠ | 1-212-849-00 | FUSIBLE | 4.7 | 5% | 1/4W F |
| R326 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R327 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R328 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R329 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| R330 | 1-215-410-00 | CARBON | 360 | 5% | 1/4W |
| R331 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R332 | 1-247-849-00 | CARBON | 5.6K | 5% | 1/4W |
| R334 | 1-247-885-00 | CARBON | 180K | 5% | 1/4W |
| R335 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R336 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R337 | 1-215-406-00 | CARBON | 240 | 5% | 1/4W |
| R342 | 1-247-741-11 | CARBON | 150 | 5% | 1/2W |
| R343 | 1-247-849-00 | CARBON | 5.6K | 5% | 1/4W |
| R344 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R345 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R346 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R347 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R348 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R349 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R350 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R351 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R352 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R353 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R354 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R355 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R356 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R357 | 1-247-849-00 | CARBON | 5.6K | 5% | 1/4W |
| R358 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R360 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R361 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R362 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R363 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R364 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R366 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R371 | 1-249-402-11 | CARBON | 56 | 5% | 1/4W |
| R372 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R376 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

## ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---|---|---|
| R378 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R379 | 1-249-441-11 | CARBON 100K 5% 1/4W |
| R382 | 1-247-767-00 | CARBON 2.2 5% 1/4W |
| R383 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R390 | 1-249-437-11 | (AEP)...CARBON 47K 5% 1/6W |
| R401 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R402 | 1-247-836-00 | CARBON 1.6K 5% 1/4W |
| R403 | 1-247-887-00 | CARBON 220K 5% 1/4W |
| R451 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R452 | 1-247-836-00 | CARBON 1.6K 5% 1/4W |
| R453 | 1-247-887-00 | CARBON 220K 5% 1/4W |
| R601 | 1-215-394-00 | CARBON 75 5% 1/4W |
| R602 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R603 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R604 | 1-249-397-11 | CARBON 22 5% 1/4W |
| R605 | 1-249-415-11 | CARBON 680 5% 1/4W |
| R606 | 1-249-411-11 | CARBON 330 5% 1/4W |
| R607 | 1-249-413-11 | CARBON 470 5% 1/4W |
| R608 | 1-249-413-11 | CARBON 470 5% 1/4W |
| R609 | 1-249-401-11 | CARBON 47 5% 1/4W |
| R610 | 1-249-427-11 | CARBON 6.8K 5% 1/4W |
| R611 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| R612 | 1-249-425-11 | CARBON 4.7K 5% 1/4W |
| R613 | 1-249-425-11 | CARBON 4.7K 5% 1/4W |
| R614 | 1-249-419-11 | CARBON 1.5K 5% 1/4W |
| R615 | 1-249-425-11 | CARBON 4.7K 5% 1/4W |
| R616 | 1-249-425-11 | CARBON 4.7K 5% 1/4W |
| R617 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| R618 | 1-249-405-11 | CARBON 100 5% 1/4W |
| R619 | 1-249-405-11 | CARBON 100 5% 1/4W |
| R620 | 1-249-421-11 | CARBON 2.2K 5% 1/4W |
| R621 | 1-247-887-00 | CARBON 220K 5% 1/4W |
| R622 | 1-247-887-00 | CARBON 220K 5% 1/4W |
| R623 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R624 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R625 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| R626 | 1-249-435-11 | CARBON 33K 5% 1/4W |
| R627 | 1-249-417-11 | CARBON 1K 5% 1/4W |
| R851 | 1-249-413-11 | CARBON 470 5% 1/4W |
| R852 | 1-249-401-11 | CARBON 47 5% 1/4W |
| R853 | 1-249-440-11 | CARBON 82K 5% 1/4W |
| R854 | 1-249-438-11 | CARBON 56K 5% 1/4W |
| R855 | 1-249-437-11 | CARBON 47K 5% 1/4W |
| RV301 | 1-228-993-00 | RES, ADJ, CARBON 4.7K |
| RV302 | 1-228-991-00 | RES, ADJ, CARBON 2.2K |
| RV303 | 1-228-991-00 | RES, ADJ, CARBON 2.2K |
| RV304 | 1-228-993-00 | RES, ADJ, CARBON 4.7K |
| RV401 | 1-237-024-11 | RES, VAR, SLIDE 100K/100K (100Hz) |
| RV402 | 1-237-024-11 | RES, VAR, SLIDE 100K/100K (400Hz) |
| RV403 | 1-237-024-11 | RES, VAR, SLIDE 100K/100K (1kHz) |
| RV404 | 1-237-024-11 | RES, VAR, SLIDE 100K/100K (4kHz) |
| RV405 | 1-237-024-11 | RES, VAR, SLIDE 100K/100K (10kHz) |
| RV406 | *1-230-910-11 | RES, VAR, SLIDE 20K/20K (VOLUME) |
| S1 | 1-554-123-00 | SWITCH, SLIDE (FM SENS) |
| S301 | 1-570-942-11 | SWITCH, SLIDE (REC/PB) |
| S302 | 1-570-944-11 | SWITCH, LEVER SLIDE (FUNCTION) |
| S303 | 1-570-068-11 | SWITCH, PUSH (1 KEY)(DECK A/B) |
| S304 | 1-553-331-21 | SWITCH, PUSH (RADIO/LINE IN) |
| S305 | 1-553-331-21 | SWITCH, PUSH (EQ) |

## ELECTRICAL PARTS

| Ref.No. | Part No. | Description |
|---|---|---|
| S306 | 1-570-068-11 | SWITCH, PUSH (1 KEY)(REC MUTE) |
| S307 | 1-554-123-00 | (AEP)...SWITCH, SLIDE (STEREO/MONO,ISS) |
| S309 | 1-554-123-00 | SWITCH, SLIDE (TIMER) |
| S501 | 1-554-495-00 | SWITCH, LEAF (POWER,DECK B) |
| S502 | 1-570-012-11 | SWITCH, LEAF (FF/REW,DECK B) |
| S503 | 1-554-495-00 | SWITCH, LEAF (POWER,DECK A) |
| S504 | 1-570-012-11 | SWITCH, LEAF (FF/REW,DECK A) |
| S601 | 1-554-303-21 | SWITCH, KEY BOARD (STAND BY) |
| S602 | 1-554-303-21 | SWITCH, KEY BOARD (TIMER) |
| S603 | 1-554-303-21 | (AEP)...SWITCH, KEY BOARD (MW) |
| S603 | 1-554-303-21 | (E).....SWITCH, KEY BOARD (FM) |
| S604 | 1-554-303-21 | (AEP)...SWITCH, KEY BOARD (FM) |
| S605 | 1-554-303-21 | SWITCH, KEY BOARD (SW) |
| S606 | 1-554-303-21 | (AEP)...SWITCH, KEY BOARD (LW) |
| S606 | 1-554-303-21 | (E).....SWITCH, KEY BOARD (MW) |
| S607 | 1-554-303-21 | SWITCH, KEY BOARD (+) |
| S608 | 1-554-303-21 | SWITCH, KEY BOARD (-) |
| S609 | 1-554-303-21 | SWITCH, KEY BOARD (CLOCK) |
| S610 | 1-554-303-21 | SWITCH, KEY BOARD (SLEEP) |
| S611 | 1-554-303-21 | SWITCH, KEY BOARD (5) |
| S612 | 1-554-303-21 | SWITCH, KEY BOARD (4) |
| S613 | 1-554-303-21 | SWITCH, KEY BOARD (MEMORY) |
| S614 | 1-554-303-21 | SWITCH, KEY BOARD (3) |
| S615 | 1-554-303-21 | SWITCH, KEY BOARD (2) |
| S616 | 1-554-303-21 | SWITCH, KEY BOARD (1) |
| S801 | 1-552-921-00 | (E)....SWITCH, POWER (VOLTAGE CHANGE) |
| SP901 | 1-503-750-11 | SPEAKER (LEFT) |
| SP902 | 1-503-750-11 | SPEAKER (RIGHT) |
| T1 | 1-403-872-00 | TRANSFORMER, IF (AM,10.7MHz) |
| T2 | 1-404-455-00 | TRANSFORMER, IF (AM,450kHz) |
| T301 | 1-433-222-00 | TRANSFORMER, BIAS OSCILLATOR |
| T801 | ⚠.1-448-778-11 | (E).....TRANSFORMER, POWER |
| T801 | ⚠.1-448-780-11 | (AEP)...TRANSFORMER, POWER |
| T851 | 1-448-831-11 | TRANSFORMER, DC-DC CONVERTER |
| X1 | 1-567-896-11 | OSCILLATOR (10.25MHz) |
| X601 | 1-567-769-11 | VIBRATOR, CRYSTAL (75kHz) |

## ACCESSORY & PACKING MATERIAL

| Part No. | Description |
|---|---|
| 1-555-234-00 | CORD, POWER |
| 3-339-382-01 | SHEET, PROTECTION |
| 3-340-328-01 | CUSHION (LOWER) |
| 3-340-329-01 | CUSHION (UPPER) |
| 3-701-626-00 | BAG, POLYETHYLENE |
| *3-764-430-01 | (AEP)...INSTRUCTION, DBP CAUTION |
| *3-764-430-61 | (E).....INSTRUCTION, DBP CAUTION |
| 3-769-049-11 | (AEP)...MANUAL, INSTRUCTION |
| 3-769-049-41 | (AEP)...MANUAL, INSTRUCTION |
| 3-769-049-61 | (E).....MANUAL, INSTRUCTION |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

**Sony Corporation**
**Audio Group**

**English**
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